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Facultad de Humanidades y Ciencias de la Educación

Trabajo Fin de Grado

Developing ecological consciousness: ecocritical perspectives on *Oryx and Crake*

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ABSTRACT

Literature has always been seen as a field of study which could not develop on the research against scientific and ecological problems. However, the establishment of ecocriticism as a literary school of criticism has cooperated in the elimination of this old prejudice. The aim of this Final Degree Project is to analyse the origins, the history and interdisciplinary approaches of ecocriticism, and how this literary school has helped in the developing of ecological consciousness within readers. In addition to this previous analysis, the project will address on the figure of Margaret Atwood, her novel *Oryx and Crake*, and how both of them have encouraged the role of literature within ecological problems.

KEY WORDS: ecological consciousness, speculative fiction, ecocriticism, Margaret Atwood, ecofeminism, apocalypse, *Oryx and Crake*.

RESUMEN

La literatura siempre ha sido vista como un área de estudio que no podía manifestarse en la investigación contra problemas científicos y ecológicos. Sin embargo, el establecimiento de la ecocrítica como una escuela de crítica literaria ha ayudado a la desaparición de este antiguo prejuicio. El objetivo de este Trabajo de Fin de Grado es analizar los orígenes, la historia y las aproximaciones interdisciplinarias de la ecocrítica, y cómo esta escuela ha contribuido al desarrollo de conciencia ecológica en los lectores. Aparte del análisis anterior, este proyecto abordará la figura de Margaret Atwood, su novela *Oryx and Crake*, y como ambos han incentivado el papel de la literatura en problemas ecológicos.

PALABRAS CLAVE: conciencia ecológica, ficción especulativa, ecocrítica, Margaret Atwood, ecofeminismo, apocalipsis, *Oryx y Crake*.

1. INTRODUCTION

The purpose of the present final dissertation is to defend the role of literature within ecology by the analysis of the novel *Oryx and Crake* (2003). In particular, the work will argue how literature can help in the developing of readers' ecological consciousness. The dissertation will be divided in four parts: in the first one, the cultural background of the novel will be outlined. Secondly, ecocriticism will be approached in order to get an overview of its concerns. In the third part, there will be a discussion of the importance of humanities and literature in the development of ecological awareness. Finally, the novel *Oryx and Crake* will be analysed deeply and from several ecocritical perspectives.

The first part will start with a brief summary of Atwood's biography, as her life experience really influenced her writing. Then, there will be an overview of the scientific events that occurred during the years Atwood was writing the novel. To end this part, the poem "Frogless" will be shortly analysed as a first glimpse of Margaret's environmentalism. The second part will mostly deal with theoretical concepts such as the definition(s) of ecocriticism, the history of the literary criticism school and the different intersections between ecocriticism and other schools. The third part will draw interdisciplinary connections between ecology and humanities, and it will also defend the role of humanities in addressing environmental issues. The fourth part will address the novel itself. There will be an introduction, a summary of the plot and then, the most outstanding topics of the novel will be analysed from an ecocritical perspective. At the end, the general conclusions of this final dissertation will be drawn.

2. MARGARET ATWOOD'S GREEN BACKGROUND

2.1. BIOGRAPHY

Margaret Eleanor Atwood was born on the 18th of November 1939, in Ottawa, Canada. Her mother, Margaret Dorothy, was a dietician and nutritionist from Nova Scotia. Her father, Carl Edmund Atwood, was a doctor in forest entomology who took an active role in diverse environmental organizations such as the Conservation Council of Ontario and worked in the creation of the Quetico Wilderness Park in the same city. Apart from his scientific occupation, Carl was “an omnivorous reader with a remarkable knowledge of literature, history, and classical music” (“Carl E. Atwood Graduate Scholarship”, n.d.). Therefore, this literary interest of Dr. Atwood awakened in Margaret as a child, when she began writing at the age of five. Her early years were settled, most of the time, in Quebec's woods where her father undertook his research. In later life the family moved to Ontario's capital where Margaret studied at the University of Toronto and then got her master's at Radcliffe College in Massachusetts.

From an early age Margaret has been surrounded by nature lovers and nature itself. Not surprisingly, she has become an impressive activist for several environmental issues as climate change and bird conservation. In fact, Atwood has written *For the Birds*, a children's book which is part of the “Earth Called Books” collection intended to start developing ecological consciousness in younger generations. Another instance of her activism is the invention of the Long Pen™. This device was conceived “with the mission of using the internet to deliver an author's original signature on a book between any two locations on the globe” (“Company History”, n.d.). With the creation of this gadget, Margaret was trying to avoid taking excessive flights to different cities every time a new novel is published. The result of this avoidance would be a reduction of the carbon footprint.

Apart from her well-known novel *The Handmaid's Tale*, Atwood is a prolific author who has cultivated a wide range of genres such as short-fiction, poetry, fiction, children's books, etc. She has received several literary prizes i.e. The Giller Prize and The Governor General's Award. In 2000 her tenth novel, *The Blind Assassin*, was awarded The Booker Prize whose cash benefits were donated to literary and environmental organizations.

2.2. ENVIRONMENTAL & SCIENTIFIC CONTEXT

Oryx and Crake was published in 2003 and it depicts a dreadful vision of the Earth and humankind's future. However, all these speculations are not Atwood's inventions and some of them are based on real science. The question about the reliability behind her book was one of the most asked issues. During an interview with Ira Flatow (2004), Atwood affirmed that she was well-aware of the actual scientific situation and also claimed that:

All the things in the book that people might think are very weird and they might think that I just made them up, but some of them already existed when I was writing the book, for instance the luminescent rabbit [...] and the spider goat. [...] A number of the other things have either been made already or people are working very hard to make them, for instance the pigs that can grow transplantable organs.

Indeed, during the 2000s the same scientists that cloned Dolly¹ were working on the development of genetically engineered pigs. The main purpose of their study was to alter pigs' cells so they could grow human organs that would be used for transplants. Not only this experiment gave Atwood a great scientific background for her novel, but the end of the 90s and the beginning of the century were a great time for scientific investigations. The first human chromosome was sequenced in 1999, making an enormous advance in the healing of DNA-related diseases. Besides that, the first human embryo was developed for the harvesting of stem cells around 2001.

Together with all these developments, GM² crops also experienced an enormous increase, for example, the "FLAVR SAVR" was the first genetically modified tomato kind sold for human consumption in 1994. The need for more efficient crops was marked by the growth of global population that reached 6 billion people in 1999. The urgency for more food also unleashed into a state of resource depletion that contributed, and still does, to the destruction of nature. All these food references and their consequences within the environment can be glimpsed at Margaret's novel.

Regarding environmental disasters caused by humans when Atwood was writing her book, there were many important landmarks in this world's history. In 1997 the Indonesian Forest Fires were one the most horrible ecological tragedies of the time. As Jim (1999: 251) pointed out: "an unprecedented ecological disaster involving damage to forest ecosystems and

¹ Dolly, a female sheep, was the first cloned animal from adult somatic cells in 1996.

² Genetically Modified.

a serious threat to rare flora and fauna as well as human health. [...] accelerating the rate of tropical rainforest deforestation”. The fire control was almost impossible due to the absence of resources and experience in this type of catastrophe. The fires started in September 1997 and lasted until June of the following year. Some years later, another horrible disaster took place: the Prestige oil spill. In 2002, the Prestige sank in Galicia’s coast and it resulted in one of the marine pollution events in modern history. It had disastrous consequences in the environment, the fishing industry and the damage to marine organisms.

2.3. “FROGLESS” FROM *MORNING IN THE BURNED HOUSE* (1995)

Atwood has published several poems addressing the environmental crisis, as in “Frogless” (1995)³. It was published in her collection *Morning in the Burned House*. In this poem, the poetic voice describes a post-apocalyptic scene where nature looks so different from nowadays as a climate change’s consequence. The setting of the poem is what Nye (2010: 131) named as “anti-landscape” that he defined as “a man-modified space that once served as infrastructure for collective existence but that has ceased to do so”. The frightful depiction of this environment is provoked by the unconscious actions that we carry out in our everyday life.

The poem starts with the appearance of some trees that “cast their leaves too early” as a response of the extreme weather conditions that global warming induces; seasons have changed dramatically. These extreme conditions are then revealed by the use of oxymoron, in order to emphasize the horror, as “hot gauze of snow”. The second stanza presents how spring arrives for the second time to the scene and its effect on animals is devastating: “worms drunk and burning” and “tadpoles wrecked in the puddles”. The third stanza introduces “an eel with a dead eye grown from its cheek”, a creepy image that makes the reader think of the different toxic spills that may have been poured into the river and that have caused this mutation. The poetic voice now directly asks the reader: “would you cook it?” and answers itself: “you would if”, of course you would, in this alarming situation the eel would be the only edible option. As it follows in the next stanza: “there are no others”, the world devastation would only leave you “sick fish” that would end up in human mutation because of the fish’s consumption. The voice now makes use of anaphora, the repetition implies a more serious tone. “This is not blue and green” as representative of the sky and vegetation, they are not present in Earth anymore, climate change has erased them as we know them. The whole world is the same: “travel

³ Appendix.

anywhere”, there is no place on Earth where you can escape from this reality that humans have caused: “you’ll end up here”.

The poem tries to illustrate the cyclic pattern that nature will follow if humans do not start caring about the environment. Readers see how people’s actions caused the death of nature; therefore, humans cannot survive without nature, hence humans will die. The tone of the poem is quite cynical, the poetic voice does not trust human beings and that they will overcome this environmental problem. As Abolfotoh (2015: 171) pointed out: “(Humans) to satisfy their hunger, they will eat anything”, and I will go further and I will add that not only to satisfy our hunger, but to satisfy our caprices, we will do anything, even if it means Earth’s destruction. In this poem, Atwood is taking the environmental crisis to the last consequences in order to demonstrate what Earth’s future might look like if we do not act and by that, raise some ecological consciousness and care for the environment.

3. UNDERSTANDING ECOCRITICISM

3.1. DEFINITION(S)

Ecocriticism is a relatively new field of study within literary criticism. It emerged as a study in the mid 90's, but regarding its definition, a consensus on a solid solution has not been reached yet. Different theorists and critics have tried to address the issue, although they mostly agree on the basis there are always various nuances within the different definitions proposed. In this section, I will bring up the most comprehensive definitions and expound on them as to reach the most complete one.

The first time the term “ecocriticism” was defined it was by William Rueckert (1978: 73) as the “application of ecology and ecological concepts to the study of literature, because ecology has the greatest relevance to the present and future of the world, we all live”. Even quite straightforward and clear, this definition has been criticised by later scholars because Rueckert referred to it in a very broad way. By applying ecology to literature, many questions arose such as the role of humanists, as they are not experts on ecology and its study, or even if this simple definition is effective from an ethical perspective.

As a response to this plain interpretation, Cheryll Glotfelty proposed a complex definition as she compared ecocriticism with other literary studies. She pointed out that “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 [...], ecocriticism takes an earth-centred approach to literary studies” (Glotfelty & Fromm, 1996, p. xviii). In her suggestion, she approaches to the term in a more analytical way, but still leaving behind the social and political role that ecocriticism could have.

In 2004, Michael P. Cohen took Glotfelty's definition and added the critical focus that ecocriticism was missing. Cohen (2004: 10) stressed that:

Ecocriticism focuses on literary expression of human experience primarily in a naturally and consequently in a culturally shaped world: the joys of abundance, sorrows of deprivation, hopes for harmonious existence, and fears of loss and disaster. Ecocriticism has an agenda.

The critical denotation given by Cohen stressed a fundamental characteristic that was missing in the previous analysis under ecocriticism. The fact that he emphasized ecocriticism's

political role provided with a more critical perspective further analysis. Moreover, the adding of this quality enhanced the interdisciplinary nature of the criticism.

In addition to all these definitions, the role of ecological consciousness has not been addressed yet. However, Camilo Gomides (2006: 16) expanded on this concern and redefined ecocriticism as “the field of enquiry that analyses and promotes works of art which raise moral questions about human interactions with nature, while also motivating audiences to live within a limit that will be binding over generations”. As one of the most present-day definitions, it establishes literature’s active role in developing eco awareness among readers. He claims that addressing the relation between nature and humans can produce a decisive effect on our daily activities that will lead society into an eco-friendlier community.

Timothy Clark published *The Cambridge Introduction to Literature and the Environment* in 2011 where, together with Gomides’ definition, he provided literary criticism with one of the most exhaustive definitions of ecocriticism. Clark (2011: 8) emphasized the interdisciplinary nature of the movement:

Ecocriticism makes up the arena of an exciting and imponderable intersection of issues, intellectual disciplines and politics. Its potential force is to be not just another subset of literary criticism, situated within its given institutional borders, but work engaged provocatively both with literary analysis and with issues that are simultaneously but obscurely matters of science, morality, politics and aesthetics.

This interpretation given by Clark provides most of the details that previous definitions lacked. He reinforces the idea of ecocriticism as a broad discipline where politics, ecology, ethics and literature encounter. The combination of all these subjects provides ecocritical analyses with a more influential and persuasive character. The analyses do not only focus on the interrelation between the environment and literature, but they also address texts from diverse fields of study.

3.2. THE ORIGIN AND DEVELOPMENT OF ECOCRITICISM

As aforementioned, ecocriticism is a quite recent school of literary criticism that dates from the 90s as a solid discipline. During this decade, the ASLE⁴ was founded by a group of scholars whose main interest was “in exploring the meanings of the natural environment and the complexities of human relationships with each other” (“Vision and history”, n.d.). The

⁴ Association for the study of Literature and Environment

establishment of this organization was reinforced by the creation of their own academic journal, the ISLE⁵, in 1993. Each number of the journal explores a wide range of topics regarding the relationship between the environment and humankind. The firm foundation of ecocriticism was set up by the publication of *The Ecocriticism Reader* in 1996, edited by Glotfelty and Fromm, the collection of essays which marked the beginning of the criticism.

However, these are not only the pillars of the discipline. The origins of ecocriticism as a movement are pretty remote from the 90s. Already in the 60s and 70s there were a considerable number of scholars who were working on the interactions between the natural world and human beings, i.e. Carolyn Merchant or Keith Thomas. This group of scholars worked on their theories individually, so they cannot be considered the founders of the school of criticism, but as the first people who referred environmental issues in literature. The term ecocriticism was addressed for the first time by William Rueckert in 1978, where he gave the first definition⁶. The development of ecocriticism can be divided into three waves⁷ as for their idiosyncratic features and tropes.

The first wave corresponds to the group of critics that understood the trend in a more archaic and simple way. The development of this wave was mainly promoted in British and North American literature departments. Buell (2005: 138) pointed out that these scholars focused on: “nature writing, wilderness fiction and nature poetry”. The first wave’s analysis were just a superficial and dehistoricized approach to the representation of nature in literary works. This wave gave prominence to classic authors who vividly depicted nature in their main works, as it is the case of Henry David Thoreau or William Wordsworth who were two of the most analysed authors. Recurrent terms arose while this time, such as the concept of pastoral which was described as “a stylized representation of rusticity in contrast to and often in satire of urbanism, [...] representation of country ways that are being displaced by enclosure and/or urbanization” (Buell, 2005, p.144), and it was accurately applied to Romantic poems.

In the course of time and as the study of ecology evolved, the interests of scholars changed, and it led into a second wave of ecocriticism. Even the dividing line between the first wave to the second is blurry, the second wave critics develop new interests within the ecocritical field, while always keeping the first wave’s concerns. Scholars such as Michael P. Cohen and

5 Interdisciplinary Studies in Literature and Environment: <https://academic.oup.com/isle>

6 Cited in Section 3.1.

7 This classification was proposed by Lawrence Buell in his book *The Future of Environmental Criticism*.

Camilo Gomides studied subjects such as “environmental justice issues and social ecocriticism” (Buell, 2005, p. 22). They were still concerned with the classic representation of nature in literature, but they also started cultivating more analytic visions. Politics and ethics took a central role in the new analyses, as critics started to understand human impact in nature and the destruction of environments. They advocated for the deconstruction of human-centred approach in narratives and tried to move into ecocentrism as “the view in environmental ethics that the interest of the ecosphere must override that of the interest of individual species” (Buell, 2005, p.137). Another essential feature of this wave is the opening of frontier: critics now do not just analyse British and North American landscapes. They started to cross borders and evaluate the local narratives from other countries such as India or China.

During this second wave, there was a huge addition of different ecological, political and social concepts to literature that seemed revolutionary. For example, environmental justice as an opposition against the indiscriminate environmental pollution of poor communities by rich organizations. This affluent organizations tended to exercise their power and create toxic landfills in impoverished lands. This whole idea lead into the concept of environmental racism as the previous practices were usually carried out in boroughs where black people lived in the US. These terms will be mostly presented in a postcolonial ecocritical approach to texts.

Nowadays, ecocriticism’s paradigm is represented by the third wave. Critics from the new wave bring new perspectives to the school, their writing presents a “current interest in exploring ethnicity through the study of environmental literature” (Slovic, 2010, p. 4). They took further the idea of the second wave critics and analysed beyond Anglo-American narratives. Moreover, as Gladwin (2017: 1) stated “(the third wave) advocates for a global understanding of ecocritical practice through issues like global warming”. This new perspective on ecocriticism tends to analyse human experiences, through environment. Therefore, new approaches and terms have arisen as gendered approaches (green queer theory) and global concepts as eco-cosmopolitanism or trans locality. Some of the most outstanding scholars who are currently working on these trends are Catriona Mortimer-Sandilands and Bruce Erickson-They have defined queer ecology as “a new practice of ecological knowledges, spaces and politics that places central attention on challenging hetero-ecologies from the perspective of non-normative sexual and gender positions” (Mortimer-Sandilands & Erickson, 2010, p. 22). On their book, they suggest that discourses of sexuality and discourses of nature influence each other, and as kind of symbiotic process.

3.3. DIFFERENT APPROACHES

Due to the interdisciplinary nature of ecocritical studies, I strongly believe that it is worth mentioning some of the most influential intersections with other schools of criticism. These two blending completes the study spectrum of ecocriticism. Firstly, ecofeminism will mainly compare the correlation between women's subjugation to patriarchy and nature's domination by the anthropocentric perspective of men. On the other hand, postcolonial ecocriticism will focus on the violent acts that Westerns performed against indigenous cultures and nature, due to colonists' Eurocentric and anthropocentric perspectives.

3.3.1. ECOFEMINISM

The term ecofeminism was used for the first time by Françoise d'Eaubonne in 1974. In her book *Le féminisme ou la mort*, the author coined this term as a reference to some feminists' preoccupation for overpopulation, nature devastation and male domination. The development of the combination between ecocriticism and feminism prospered first in fields of study such as politics or philosophy. It was during the 90s in USA when ecofeminism started to have its place within literary studies. This branch of ecocriticism was well-defined by Gaard & Murphy (1998: 2) as "a practical movement for social change arising out the struggles of women to sustain themselves, their families, and their communities. These struggles are waged against the "maldevelopment" and environmental degradation caused by patriarchal societies, multinational corporations, and global capitalism". In other words, the blending of these two discourses analyses the relation between double patriarchal domination over nature and women. Moreover, it blames this patriarchal domination for the destruction of ecosystems and for the environmental degradation of Earth.

Along with the development of ecofeminism, several discourses within the main movement, "feminism is not a single master theory and its practitioners have different articulations of their social practice" (Gaard & Murphy, 1998, p. 2). Two of the main schools of thought that derived from ecofeminism are radical ecofeminism and cultural ecofeminism. The difference between these two discourses remains in the traditional association between women and nature, and men and culture.

Cultural ecofeminism mainly developed among North American critics. This branch of ecofeminism affirmed the positive relationship between women and the environment. Miles

(2018) also claimed that “they contend that women have a more intimate relationship with nature because of their gender roles (e.g., family nurturer and provider of food) and their biology (e.g., menstruation, pregnancy, and lactation)” Cultural ecofeminism critics strongly believe too that this relationship will help women ending patriarchal domination over the environment and nature.

On the other hand, radical ecofeminism principles were adopted by European scholars. They completely denied the intimate relationship between women and nature that cultural ecofeminism supported. In their opinion, this conception diminishes women only to their reproductive functions and role as a mother. Moreover, the comparison will strengthen the idea of nature as an inanimate entity that is only used for human exploitation. Therefore, radical ecofeminists’ main aim is to destroy these associations in order to end with the subjugation of women and nature over patriarchy.

Ecofeminist literary criticism is an interdisciplinary subject that is based on many other disciplines such as political theories of ecology, feminist ethics or feminist literary studies. Within the background of all these branches of knowledge, literary ecofeminism studies focus on several issues such as:

1. The relation between the natural/animal world and the future of humankind depicted in a literary work. Critics study these relationships in order to find if texts reveal any environmental complaint, and if these denounces are told by women or by men. The thought-provoking conclusion of this study is that if it is a female character who expresses the denunciation, the whole situation is not given the same importance as if it is a male character: a completely androcentric perspective.
2. The study of the connection between androcentrism and anthropocentrism⁸, and how these relationships with nature may reveal some biased conceptions within the dichotomy’s culture/nature and male/female.

⁸ Buell (2005: 134) defined as “the assumption or view that the interests of humans are of higher priority than those of nonhumans”.

3. The study of the narrative discourses within male and female nature. As mentioned before, men were compared with science and that may be the reason that in a great number of narratives they are the one allowed to think, feel or live. On the other hand, women are related to nature and their only role in certain narrations is to be a mother in order to raise children and provide them with food.

3.3.2. POSTCOLONIAL ECOCRITICISM

Postcolonial studies consolidated as a literary school around the early 80s. It was back then when a group of Asian scholars started the development of postcolonialism as a school of criticism. *Orientalism* (1978) by Edward Said, a member of the previous scholars, definitely marked the beginning, but we cannot deny the previous work by scholars such as Frantz Fanon, Chidi Amuta or Homi K. Bhabha. In order to understand the basis of postcolonialism, Khun and Westwell (2012: 1999) defined it as:

the study of the cultures of countries and regions, especially in Africa, Asia, and Latin America, whose histories are marked by colonialism, anti-colonial movements, and the transition to independence during the 20th century, and the study of their present-day influence on the societies and cultures of former colonizers.

Within this context, postcolonial criticism works on the literary representation of the effects that Western empires caused in colonised populations and their culture. Postcolonial criticism analyses the depiction of concepts such as otherness, orientalism and diaspora, among others.

At first sight, ecocriticism and postcolonialism may seem two contradictory theories due to their perspectives, as postcolonialism tends to give an anthropocentric analysis of narratives while ecocriticism approaches literature from an earth-centred perspective. However, the creation of postcolonial ecocriticism has been present almost since the beginning of ecocriticism. Already in 1995, when Lawrence Bull published his book *The Environmental Imagination* he referred to this coalition of theories, Buell (1995: 6) pointed out that “the ecological colonization of the Americas by disease and invasive plant forms is as crucial as the subjugation of their indigenous peoples by political and military means”. Buell compares the degradation in Native American nature and the oppression that Europeans exerted on the population of the continent, under his point of view both of them were horrible and must be studied at the same level.

Ecocriticism itself is formed of an interdisciplinary analysis that inspects and studies the ways in which literary texts address different environmental issues, by means of culture and milieu. As a matter of fact, postcolonial ecocriticism would build on this conception and complete the study of the domineering relationships and the concept of otherness within the context of nature.

The examination of these interrelations developed an essential term around which postcolonial ecocriticism will concentrate on a great part of its research, and that is environmental racism. This term reminds of the time of European colonialism from where it takes the notions of empty environments. These ecosystems are seen, under the coloniser's eyes, as inhabited by less rational and evolved cultures who live harmoniously with nature. That is the reason why they feel the right to dominate them. As Plumwood (2003) described the relation between colonialism and nature extermination:

The very ideology of colonisation is thus one where anthropocentrism and Eurocentrism are inseparable, with the anthropocentrism underlying Eurocentrism being used to justify those forms of European colonialism that see 'indigenous cultures as "primitive", less rational, and closer to children, animals and nature'. (as cited in Tiffin & Hugganm 2010, p.5)

Native cultures are usually named as "Others" since they appear to belong to a different species as they live, develop and evolve in peace with nature. Consequently, European colonists tend to group nature and the indigenous cultures under the same label. Therefore, colonists oppress both, people and nature.

4. THE ROLE OF LITERATURE WITHIN ECO-SUSTAINABILITY

Throughout the history of humankind, literature has been mostly relegated to the role of entertainment and recreation. Therefore, the study of literature as an academic discipline might not be acknowledged by part of the population. In our nowadays utilitarian society, where everything must have a clear and established purpose, literary studies are downgraded due to their artistic nature and “uselessness”. Bond (2007: 77) pointed out that “nowadays art is often dismissed as irrelevant to the solution of social problems”. However, these assertions are not accurate with the real situation of literature. Several scholars reinforce the usefulness of literature and society’s necessity of it. Not only for the enjoyment that literature brings, but because the social function that it performs within the shaping of society’s thinking.

In the last decades, the environmental crisis has aggravated seriously and most of Earth’s natural resources are being depleted. Nevertheless, the economic crisis has magnified its effect in the last few years. Scholars pointed out that this situation started years ago, at the age of the Industrial Revolution. During these past years, not only society started to change, but also climatological conditions started their declension.

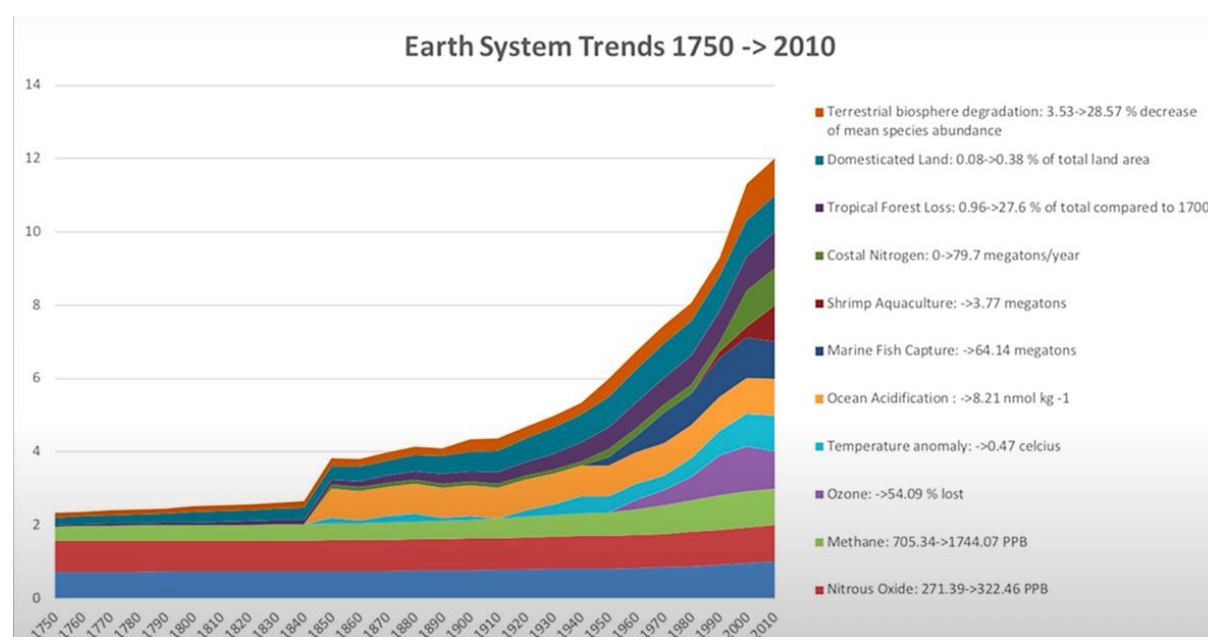


Fig. 1: The Great Acceleration of the Anthropocene from 1975 to 2010⁹

⁹ Adapted from *How the Humanities Can Save the Planet: Living Sustainably*, by J. Bate, 2019, <https://www.youtube.com/watch?v=7xiF08tITQs&t=1487s>

As the previous graphic shows, there has been a hugely impact of human development in nature. The most outrageous datum is the biosphere's degradation, which implies the increase of species loss from 3.53% to 28. 57%. Due to these horrible data, it is completely understandable that scholars from all fields of study are concerned about these environmental issues. Notwithstanding the clearly scientific approach that scholars should adopt in order to save Earth's future, humanists can also contribute to the environmental crisis' solution. Timothy Clark (2011: 4) stated that "a peculiar feature of environmental questions is how very soon they reach the limits of the competence of any intellectual discipline. The issues often require an environmental and scientific literacy as well as a critical and historical one". It is crystal clear that literary critics and authors cannot develop environmental projects or conduct experiments, but they can make their contribution by means of literature. From the different actions that scholars can carry out against environmental degradation, Garrard (2004) distinguished between "problems in ecology" as the issues that scientists must address and design solutions in order to prevent the depletion of natural resources, and "ecological problems" as the problems that should concern humanist ecocritics.

The role of humanists occupies a fundamental place in the study of these ecological problems. Worster (1993: 27) enhanced the position of humanities as:

Getting through the crisis requires understanding our impact on nature as precisely as possible, but even more, it requires understanding those ethical systems and using that understanding to reform them. [...] literary scholars, anthropologist, and philosophers cannot do the reforming, of course, but they can help with the understanding.

Worster equates the role of humanists with the scientist's one. The fact that scientists develop strategies and formulate new concepts is useless, if there is none to explain them to society. This idea of spokesperson between ordinary people and ecologists is also presented by Jonathan Bate (2019) in his lecture in Arizona State University. Humanists have always taught different techniques to master the art of rhetoric. This ability comes from the Ancient Greece's schools, where they believed rhetoric as one of the main subjects that human beings should acquire. Nowadays, the encouragement of persuasive speech and critical thinking is present in environmental humanities departments all around the world, as to teach students how to communicate good popular science. So that, it is evident that sustainability needs from humanities, in order to get their message properly to common people.

Apart from the role of literary critics, writers can also contribute by the creation of narratives that pay attention to the environment and the relationship between nature and

humankind. The creative process of authors in order to convey narratives where readers might notice the environment are quite disparate. Authors might decide whether to represent a devastated environment or an idyllic landscape, but at the end they all help in developing some kind of ecological consciousness between readers. Atwood, who is a prolific author, has produced several pieces of narratives, poems and short stories that demonstrate her environmental commitment. In addition to Atwood's nature writing, she also contributes to the development of scientific experiments by the donations to different organizations. In this dissertation, the poem "Frogless"¹⁰ has already been analysed, and in the following section the novel *Oryx and Crake* will be analysed from different ecocritical perspectives.

¹⁰ See section 2.3.

5. ORYX AND CRAKE

5.1. INTRODUCTION

Oryx and Crake was published in 2003. It is the first book of the *MaddAddam* trilogy, and it would be later followed by *The Year of the Flood* (2009) and *MaddAddam* (2013). Regarding the genre, the novel was firstly classified as science fiction, but it was Margaret Atwood during an interview in *The Guardian* when she reclassified the genre as “speculative fiction”. Atwood insisted that “science fiction has monsters and spaceships; speculative fiction could really happen” (Potts, 2003). The author affirmed that she carried out a detailed research about the scientific situation of the moment, then the novel should not be understood as something impossible but as a viable depiction of the future. The fact that the author reinforced the concept of speculation and all the previous scientific research evidently shows Atwood’s environmental consciousness and the instructive purpose of *Oryx and Crake*.

This book offers two narratives: the survival story of the self-titled Snowman who’s possibly the only survivor of the end of humanity and Jimmy, an average boy who grows up in a near-future that leads to the same end of the world. Jimmy and Snowman happened to be the same person and Jimmy’s narrative is presented by Snowman’s memories of life. Both characters’ stories drive the plot to a solitary second in time, the puzzling reason of the humankind’s fall. Jimmy’s retelling is presented in simple chronological order and ends up with an explanation of what happened to the world. Snowman literally retraces his steps in an attempt to recover some supplies and eventually finds himself once again at the place where Jimmy’s life ends, and Snowman’s begins.

The scenario of this story also occupies two distinct worlds: the not so distant future determined by the technology and innovation, and the dystopian world from where Snowman tells the story. The exact location is not addressed, but readers can guess that it is somewhere in Canada.

Jimmy’s world is marked by the ideas of social and economic segregation. The background where the novel occurs is additionally described by the quick progress of science regularly without the close analysis and debate of genetical engineering’s aftereffects. Further complicating the reality of this near future setting is the general apathy of its inhabitants to ethics and entertainment pornography. Depravity is readily available to anyone as broadcast suicides and executions as in “hedsoff.com, which played live coverage of executions in Asia”

(p. 82)¹¹. Population also used to visit “brainfrizz.com” where “they showed electrocutions and lethal injections” (p. 83). The world where Jimmy is presented offers an utopian atmosphere as the preceding of a dystopian world, at least for the upper class, that is rapidly approaching a critical decisive point. Whether Crake’s creation of perfect humans and the engineering of the society is a good or an evil act is widely open to interpretation.

Snowman’s world is an envisioned future where people have simply ceased to exist. Unlike other conceivable dystopian worlds, the actions that have expelled humankind from the Earth have left nature devastated and the legacy of scientific progress is dangerously apparent in the number of genetically modified creatures roaming the landscape. What is perhaps the most disturbing aspect is the unpreparedness that Snowman has in trying to survive. Snowman himself has been taken back to the beginnings of humankind and at the moment of his narration he is living on a tree. He is ill-equipped to feed himself to survive and to protect from the sunlight. There is hope however when Snowman discovers that other people have somehow survived the apocalypse. This realisation changes the setting from one of the final ends of humanity to a possible chance of repopulating the world.

5.2. SUMMARY

In broad terms and in chronological order, the plot develops as follows. Jimmy is a teenager struggling to manage with the problems between his mother and father. Jimmy’s father is a fruitful corporate representative and his mother used to work at the same corporation but at the moment at the narration she just works at home. Neither of Jimmy’s parents are very competent at communicating with their son. A couple of years after the fact that Jimmy’s mother relinquishes her family in order to battle against the science corporation that rules society. Jimmy eventually meets another teenager, Glenn, who will become the well-known scientist, Crake. These two teenagers share a lot of interests and hobbies, not uniquely a funny obsession with pornography and their obsession with suicide streaming, but they also happen to like an attractive pornographic performer who will become the enigmatic Oryx later on the story.

Jimmy’s talents centre around the study of humanities, linguistic and philosophy, which are not specially significant in this scientific and utilitarian society where they live. He attends a decrepit university, the Martha Graham Academy, where they offered modules such as “Latin

¹¹ All the quotations of the novel will be retrieved from Atwood, M. (2003). *Oryx and Crake* (1st ed.). New York, USA: Anchor Books.

or book-binding: pleasant to contemplate in its way, but no longer central to anything” (p. 187). Jimmy finds work by monetising his capacity on promoting and advertising items from scientific industries. Jimmy’s sexual desire is punctuated by a fixation on physical intercourse and absence of sentimental association with his partners. As a grown-up person, he has various sexual partners, none of which offers him an enduring relationship as “he was restless. Even sex was no longer what it had once been, though he was still addicted to it as ever” (p. 253).

The revelation that his mum has been killed leads Jimmy to turn into a loner. At the stature of Jimmy’s mental breakdown, Crake returns now as a fruitful researcher who works for an organization that produces a medication that will assist with diminishing worldwide overpopulation through sterilization without clients’ previous information. By one way or another, Crake has been able to track down Oryx to who Jimmy is still very attracted to. In this situation, Crake gets Oryx to work for him at the corporation. She is the educator of the genetically modified human children that Crake had designed. Oryx and Crake appear to have, at this moment, some sort of romantic relationship. Notwithstanding the nearness of Crake, Jimmy and Oryx started a to maintain sexual intercourse: “Crake’s sexual needs were direct and simple, according to Oryx; not intriguing, like sex with Jimmy” (p. 314).

Jimmy is the one left in charge of the internal temple of the corporation in Crake’s research, Oryx and Crake are helpfully missing when new reports indicate that a new super virus is rapidly spreading and destroying humanity. Crake is the one liable for the infection and has tricked Oryx into dispersing the virus all around the globe with the sexual pill he created. Crake returns at the corporation and executes Oryx as “he slit her throat” (p. 329) next to Jimmy. Jimmy subsequently executes Crake and any hope of a cure for the disease. As the world dies around him, he passes the following months secured in the compound with the wilfully unaware children of Crake. Jimmy finally uncovers himself to them as Snowman and leads them into the present reality. Snowman’s story now gets one of the essential survivals. The Crakers are able to take care well enough of themselves, but Snowman remains to look out for them.

Snowman concludes that he should go back to the compound in order to obtain more food and items to protect himself. Genetically modified creatures harassed and threatened him through his excursion. Subsequent to beating numerous difficulties, Snowman comes back to the Crakers and finds out that normal people have found them. Finally, he looks up for the visitors down and the story ends just as Snowman is about to approach them as “advance with a strip of bedsheet tied to a stick, waving a white flag? *I come in peace*” (p. 373).

5.3. WOULD SCIENTISTS DESTROY THE WORLD?

Atwood has always emphasized the fact that the novel should be considered speculative fiction and not science fiction. Atwood did an extensive scientific research on which she based the foundation of the novel. The narration of *Oryx and Crake* deal with different biological and genetic engineering issues from the beginning of the century. However, the story focus on the moral and ethical responsibilities that fall on scientists. Scientists are given so much power as they are able to design new creatures and to manipulate already existing ones and depending on their intentions this much power could be disastrous for humanity. The novel presents two main characters who are capable to wield this power over nature, they are Jimmy's father and Crake.

Jimmy's father is not really present during the novel as he is always working, he mainly appears at the beginning. Father's work is in the "NooSkins" laboratories of "HelthWyzer", the famous corporate who develops the genetically modified creatures. However, Jimmy's mother used to be a brilliant scientist at the laboratories of "HelthWyzer" too, but at some point, she became disappointed with the immoral experiments they were carrying out. These two characters seem to be arguing all day because of their different opinions towards the genetic research that Jimmy's father was carrying out:

"We can give people hope. Hope isn't ripping off!"

"At NooSkins' prices it is, you hype your wares and take all their money and then they run out of cash, and it's no more treatments for them. [...] You used to be so ... you had ideals, then" (p. 56-57).

In this particular scene, they are having an argument about the morality and ethics of the father's investigations. Sharon berates the fact that "NooSkins" will use the genetic research to take advantage of people. The company not only works with the development of new human skin, but they also experiment by combining human and animal DNAs. Sharon annoyance is not only because of the astronomically expensive prosthetic skin, but also because she considers immoral the mixing of DNAs.

The second character who can exercise this power over the laws of nature is Crake, Jimmy's best friend. Crake is a remarkably intelligent student of science, whose main interest is the creation of a new race of humans who are optimal biologically speaking. During the novel he studies how to end human problems but in an "elegant" way. There is no clear definition of what he understands as "elegant solution", but for example he considers hormones and

emotional attachment as “inelegant solutions” for human reproduction. In order to pursue his ideal of optimal humans, Crake develops the “BlyssPluss Pill” that would leave the person who takes it sterile, the pill would “act as a sure-fire one-time-does-it-all birth-control, for male and female alike, thus automatically lowering the population level” (p. 294). However, this effect will not be the only that the “BlyssPluss Pill” causes. As people started to take it, people would not become sterile, but they would die immediately. Crake is a ruthless scientist that will do anything to reach his scientific hopes. His unethical actions will be unstoppable until he reaches his main goal of an “elegant” end of humanity. The effects of the “BlyssPluss Pill” are not something that Atwood just came up with. Even though she has not explicitly expressed that, this idea of controlling society’s birth rates was already mentioned in Aldous Huxley’s *Brave New World*. The novel was first published in 1932. It tells the story of a future society in which reproduction and emotions are controlled by laboratories. Both novels share several common topics such as how dangerous irresponsible powerful people can be and, most obviously, the use of new technology and science in order to control society.

Nonetheless, in *Oryx and Crake* the really unethical power that drives these two characters to perform these experiments are corporations. At the end of the day, these businesses are only concerned about their prosperity, and they would do anything to keep their economic status. Science is just one of the instruments to preserve their high profits:

“So, you’d need more sick people.” [...] “The best diseases, from a business point of view,” said Crake, “would be those that cause lingering illnesses. Ideally – that is, for maximum profit – the patient should either get well or die [...]” (p. 211)

They are even able to make people sick or to kill them if that is what generates economic benefits. Corporations would order to inject new diseases so they can also produce a cure to them, in order to keep earning money.

These extreme extrapolations of science advances might seem at first sight an assessment of the 21st century scientific culture. The exploration of scientific progress’ humanitarian cost, as Howells (2006: 162) clearly pointed out “the what if Oryx and Crake is simply, what if we continue down the road we’re already on? How slippery is the slope? What are our saving graces? Who’s got the will to stop us?”. Atwood speculates about how the near future will be if the power of science gets into the wrong hands. Moreover, under the detailed critique of science abuse and how the lack of responsibility can provoke the end of the world, Margaret’s critique can be taken a little further and it will also relate to actual capitalist society.

Corporations on the novel are uncontrollable entities that will try to maximize their profits no matter what. There is a clear correlation between Atwood's compounds and the early 21st century situation, where money and power is more influential than the environment and human lives. Irwin (2009: 45) already pointed out that "the myth that abundant technologies will deliver a great and unified world is disproved by Atwood in *Oryx and Crake* through her presentation of a world in which these technologies are only made available to people who have money and power". The arrival of new scientific methods and technology did not bring any good result to nature, nor to population. Unlike it was believed, big companies were the only ones who got profits from these advancements and they did not care about the environment or society,

5.4. PLAYING GOD: DESIGNING SPECIES

"With great power comes a great responsibility"¹². However, power is not always used in a moral way. Some of the genetically modified species that are created in *Oryx and Crake* did not come up out of nowhere. As a response of the last studies in nanotechnology and genetic engineering, Atwood developed some of the creatures of her novel. Scientist are able to create hybrid animals or even a completely new species from scratch. These creations make the reader think whether scientists are really working in all these developments for humanity's sake or they are just playing God and it is just the excitement of feeling powerful over nature. Different genetically modified species arise within the novel, some of the most outstanding are "rakunk", "pigoon" and "The Crakers".

The first creature that readers are presented is the "rakunk", a mixture of a rat and skunk. It was given by Jimmy's father as a birthday present. As the exorbitant price of prosthetic skin, the gift started an argument between Jimmy's parents too. Sharon did not accept the idea of this creature as a pet as she claimed that genetically modified creatures were not being developed for human entertainment. However, Jimmy's father thought of it in a completely different way: "There'd been a lot of fooling around in those days: create an animal was so much fun, said the guys doing it. It made you feel like God" (p. 51). In fact, he finds it quite nice as the scientist have fun and felt really powerful while creating the "rakunk". This fragment also relates to religion. It suggests that humankind has been punished by God as they have played with nature

¹² Famous quotation from *Amazing Fantasy* by Stan Lee.

and have tried to equal God's power. This punishment is, in an ultimate sense, the post-apocalyptic world from where Snowman tells the story.

In chronological order, "pigoons" are the second genetically modified creature that appears in the novel. The purpose of this project was "to grow an assortment of foolproof human-tissue organs in a transgenic knockout pig host – organs that would transplant smoothly and avoid rejection" (p. 22). Again, we find genetically modified creatures, but now they seem to have a more humanitarian purpose as it is in order to help humanity. This kind of experiments are taken further in the novel *Never Let Me Go* by Kazuo Ishiguro. Both novels, *Oryx and Crake* and *Never Let Me Go*, are settled in a speculative fiction where animals in former and clones in the later one is genetically modified to create organs for humans. Other aspects that are key in both narratives are the sense of responsibility and ethical decisions. In *Oryx and Crake* the problem comes with scientists' ambition. There is a moment when "pigoons" started to suffer because of the vast number of organs that they were being pushed to grow inside themselves. Scientists now failed in the ruling of nature's power and the suffering of this animals most of the times ended in death. Later on, Snowman will find some of these animals when he returns to the city, and they have become huge savage creatures with predatory instincts.

Lastly, the Crakers are the last creatures that appear in chronological order, but the ones who play a more important role. The Crakers are the result of the Crake's dream, to create a whole new species of improved human beings. These creatures gather the best features of the rest of the species available at the time of their creation. Crake gave them a great skin that protects them from the harmful UV radiations and a unique digestive system that allows them to eat any vegetation or roots from the environment.

But apart from providing them with these unique features, he also tried to erase from them what he called the human's "inelegant solutions". Crakers were not given feelings and sex was reduced to a routine act when women were ovulating: "sex is no longer a mysterious rite, viewed with ambivalence or downright loathing, conducted in the dark and inspiring suicides or murders. Now it's more like an athletic demonstration, a free-spirited romp" (p. 164). Crake's description of the reproductive methods he gave the Crakers somehow conveys his obsession with the end of human problems. He strongly believed that erasing sex from them will consequently end with all human suffering that came from sexual desire. The idea of Crake playing God is crystal clear as he is the main designer of the Crakers and the one who decides what goes in their DNA and what does not.

This idea of playing God is strongly related to the previous section conclusions. Responsibility is the true corn stone of science. Atwood has always recognised herself in favour of scientific progress, but it has to remain cautious. Scientists should be really aware that their experiments could be disastrous for the Earth, for example she satirizes the idea of scientists having fun while genetically manipulating animals, in order make readers aware of the coming effects that these scientific entertainments may cause. Deery (1997: 482) claimed that in the world of *Oryx and Crake*, scientists are “invading territories and putting down stakes are not the only ways of conquering nature. Western scientists, too, have traditionally been depicted as subduing nature...They share some of the same attitudes as colonists: conquer, map, know, sell”. By means of this quote, Deery is trying to link a more canonic ecocritical point of view with the reality created by Atwood. Society does not stop evolving, and even the damaging behaviours evolve. Playing God is the new way by which humans will keep on destroying the Earth and conquering nature. Progress and evolution have brought to society new ways of environmental subjugation and irresponsible scientists are the ones who will continue with environment’s devastation.

5.5. SCIENCE VS. HUMANITIES

Oryx and Crake depicts a world wherein the humanities (history, writing, even language itself) have gotten degraded notwithstanding the ascent of science, commercialization, and entertainment. History has become just the background of computer games, for example, the game "Blood and Roses" that Jimmy and Crake played. Language and writing are basically a device for companies to promote and showcase their products, and thus language gets useless as it is not able to bring out further human emotions or thoughts.

All things considered, the novel emphasizes the significance of language and the humanities, and their fundamental job in making people human. Jimmy realizes that being a "word person" makes him second rate in society, yet he cannot surrender his adoration for language, regularly rehashing to himself arrangements of old words that. What is more, the novel suggests that Jimmy being a "word person" in certainty adapts him. While Jimmy is one of the real humans on Earth after the plague, the novel suggests that Jimmy is one of the last “real human” person even before most different people kick the bucket from the infection. His humanistic side is the thing that redeemed him, metaphorically and literally: “from nowhere, a word appears: Mesozoic. He can see the word, he can hear the word, but he can’t reach the word...this is happening too much lately, this dissolution of meaning” (p. 39). The character

suddenly remembers the word “Mesozoic”, but he is not able to find out what it really means. As the story goes on, the reader is aware of how Snowman is losing his language. Language is the basis of culture, and without understanding vocabulary, people will not be able to understand the world.

The tale stresses that an advancement fixated culture which just looks forward, and neglects to ascribe importance to the past, may make individuals neglect to consider themselves to be individuals from a brought together human culture; may make them stop to be "human" in a way we would perceive. The book suggests that an unchecked quest for logical advancement has a dehumanizing impact. Shannon Hengen (2006: 75) clearly stated that Atwood “reminds us of the importance of the imagination and as of the arts as companion to science. To separate them, or to ignore and degrade arts altogether, is to threaten our very being as human”. Jimmy's inclination of seclusion and estrangement and his edginess to clutch old and obsolete words and pictures is demonstrative of this. Crake attempted to erase such "social" and "humanistic" needs out of the Crakers: “as soon as they start doing art, we’re in trouble” (p. 361). However, they keep on having an intrigue fantasy, religion, and even workmanship. Crake built up the Crakers since he trusted them to be the most "elegant" answer for the issue of resistance. But the fact that he was unable to remove their enthusiasm for history, language and workmanship proposes that these things are not just a wellspring of bliss or moral honesty but necessary to human endurance itself. As Snowman returns from the Compounds, he encounters that all against Crake’s effort in erasing culture from the Crakers has been useless, the Crakers had designed a “a picture of you, to help us send out our voices to you” (p. 361). The statue represents the human need of culture and symbolic thinking.

5.6. ORYX AS GAIA: ECOFEMINIST PERSPECTIVE

Oryx is a totally different character. Sold as a youngster slave at a youthful age, she was constrained into prostitution and defrauded in endless demonstrations of pitilessness and embarrassment. Therefore, her past memories are diminished to her as a sex article and men as strolling penises: "She could remember the peculiarity of his penis, but she couldn’t remember the singularity of his face" (p. 154). As she grew up, men continued mistreating her, yet she had the option to figure out how to utilize this exact same maltreatment as devices to get away from her job as an inferior, by exchanging sex for culture: "I traded him [...] He taught me to read. To speak in English and to read English words” (p. 166). In this manner, Oryx isn't just not damaged by all the mistreatment she experienced, but also from the lack of desire for

payback. Subsequent to learning English, Oryx is offered to an old American man as a "garage girl" (a sex-slave who is supplied by the proprietor in the carport, alongside his vehicle which, as a materialistic man, is his other most loved article). While Oryx develops and from a good and scholarly point of view, Crake works on building up his whole world destroying plan, just as fruitlessly attempting to discover Oryx. He at last finds this lady, who is basic to his likely arrangement and who got legendary to him when he was an undergraduate student. Oryx and Crake at last meet coincidentally, since she is sent to him by Student Services; which provides students with prostitutes, so they don't lose centre around their investigations when they need sex. Indeed, it turns out to be clear the world delineated in *Oryx and Crake* is a totally phallogocentric one that is fixated on fulfilling masculine's desires, simultaneously as satisfying humanity's logical and sexual desire.

While Crake keeps on with his scientific research at university and Oryx is a sex-slave; Jimmy goes to a humanities school; a foundation which, in this misrepresented variant of utilitarian world, is completely pointless. In this way, the school has designed its logo so as to draw in more students: "Our Students Graduate with Employable Skills, ran the motto underneath the original Latin motto, which was *Ars Longs, Vita Brevis*" (p. 220). In the wake of graduating, Crake employs Jimmy to make ads for his new organization. The organization delivers and sells the BlyssPluss Pills. Crake will likely spare the planet from human-initiated end times however, simultaneously, to give Oryx the open door for vengeance on the men who mistreated her as a kid and as a young lady. In any case, Crake carries on in a patronizing attitude towards ladies by and large, towards Oryx specifically. As a sort of big-hearted tyrant, he will give Oryx what he considers that Oryx needs, not what she might think she needs.

At the point when Jimmy shows up at Crake's office, he finds Oryx. She is teaching Crake's genetically new created race. The individuals from the new race are liberated from all human feeling and sexual craving. Oryx is appointed by Crake as some sort of teacher: "we need a go-between, somebody who could convey on their own level" (p. 363). Oryx is the one who teaches the Crakers what to eat, how to relate with nature and how to take care of themselves. As Oryx's presence is the only human relationship that the Crakers developed until the arrival of Jimmy, they perceive Oryx as a Goddess who knows everything about nature, just as Gaia in Ancient Greek culture. This association between the character and the goddess is definitely not fortuitous, and here Atwood refers to the dichotomy established in ecofeminism between women and nature.

Some other principles of ecofeminism are that men are increasingly liable for the devastation of the planet than ladies. Thus, just a lady can show new creatures. Be that as it may, it cannot be only any lady; it must be one who has endured the most noticeably terrible torments and who has changed from a slave into a kind of wonder woman. Jimmy concurs she is the perfect teacher, yet because of drastically various reasons: "He could never become accustomed to her, she was fresh every time, she was a casketful of secrets. Any moment now she would open herself up, reveal to him the essential thing, the hidden thing at the core of life, the thing he was longing to know. The thing he'd always wanted" (p. 370-371). At the end of the day, the double Crake/Snowman represents the ideal instance of a corrupt system ruled by men and only concerned with its interests, a system which utilizes Oryx as an incomprehensible instrument of the production of another species and as the operator of worldwide annihilation.

6. GENERAL CONCLUSIONS

Throughout history, nature has been always denigrated by humankind. The environment was perceived as the background for all human actions without paying much attention to its state and degradation. Society only cared for their own welfare and progress. However, in the last years, the Earth started to stand out by human's abuse as human actions are causing an enormous environmental crisis. Scholars from all scientific fields of study have been researching on overcoming this crisis, and so are literature intellectuals. As Johnson (2009: 12) claimed "Ecocriticism, once the literary arm of environmentalism, has evolved into a multidisciplinary approach to all environmental literature, which, if ecocriticism does its work, will be all literature". The interdisciplinary nature of ecocriticism is making that several critics from other literary schools of criticism are starting to bring a green shade into their research and adopting a more environmentally concerned view. Although from a disadvantaged point, literature and its scholars are addressing the environmental crisis by focusing on the relationship between the environment and humanities. Ecocritics look into answers for ecological problems. The study of these answers and the reading of eco conscious literature is the way in which literature helps in the developing of ecological consciousness in readers.

Oryx and Crake is a novel that clearly provides readers with food for thought on environmental issues and the cost of scientific progress. Under Margaret Atwood's undeniable environmentalism and with several intertextual relationships, the novel develops on how a series of human scientific abuses ended with humanity and left the Earth devastated. Genetically modified organisms, the degradation of human relationships and the absolute power of corporations are the pillars on which the novel is written. The study of all these issues within the novel makes the reader think in the current situation and if they maybe should start caring about the way in which they treat the environment. In an ultimate sense, Atwood is trying to guess how the Earth will look if humanity keeps being so selfish that they just care of their own affairs and how this behaviour may cause the extinction of humankind, as the author already stated: "It's Not Climate Change – It's Everything Change".

The future of the Earth is uncertain, issues such as climate change, ecosystem vulnerability and toxic waste are the order of the day. Scholars such as Simon C. Estok has claimed the urgent need of society for more specialized studies in ecocriticism as the increase of the number of modules and official studies will help in population's awareness of the problem. The current situation of the Earth is critical, and humankind must start taking part in

environmental problems. Scholars such as Simon Estok “thinks we don’t have time to simply explore interesting ideas. We must dedicate ourselves to serious action” (Slovic & Yang, 2010, p. 107). Scientists have claimed that it is not late to act and save the Earth’s future, but we need to be determined and tough in the actions to fight this crisis. The combination of different fields of study such as politics, literature, ecology and economy will need to work in order to achieve a common goal. Humans will need to leave behind selfish and human-centred behaviours and really focus on effective solutions.

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8. APPENDIX

“Frogless” by Margaret Atwood

The sore trees cast their leaves
too early. Each twig pinching
shut like a jabbed clam.
Soon there will be a hot gauze of snow
searing the roots.

Booze in the spring runoff,
pure antifreeze;
the stream worms drunk and burning.
Tadpoles wrecked in the puddles.

Here comes an eel with a dead eye
grown from its cheek.
Would you cook it?
You would if.

The people eat sick fish
because there are no others.
Then they get born wrong.

This is not sport, sir.
This is not good weather.
This is not blue and green.

This is home.
Travel anywhere in a year, five years,
and you'll end up here.