

Eco-criticism's Hostility versus Anthropocentrism's Hostility in Literature

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ABSTRACT Eco-criticism studies the criticism of nature on human life. It deals with the decades that the mind of the critics engages with this issue in different fields of study. One of the elements of this criticism is the effect of human beings on nature. In this way, the human being through scientific experiments has always been dangerous to nature and his experiments have always had a deleterious impact on nature in a way that the reflection of these damages has always come back to human being himself. Eco-criticism tries to make a balance between nature and human being and overtakes anthropocentrism in nature. Focusing on nature, eco-criticism tries to identify the existence of nature for all and naturalize the relationship between nature and literature. Making this relationship in literary works leads human beings to reconcile with nature and preserve it. The authors of this paper seek to examine the traces of the conflict between eco-criticism and anthropocentrism in Atwood's greatest literary work, *Oryx and Crake*.

INTRODUCTION

For years, the glory and majesty of nature, was the central impetus for writing, painting and every kind of art. Every era had its own way of praising nature, till the romantic age, that was the most glorious period for nature-writing. Writers and poets admired nature, its power, its magic, its spirit and its grandness. But suddenly everything changed. The Great World War happened, so many people died and flowers and plants squashed under the boots of soldiers. Nature was ruined and completely forgotten in the minds of that generation. The art of writing continued, but completely different from those prior times. Those musical lines and sweet words were replaced by deadly harsh words of the Realists. Writers did not write about the beauties and harmonies, but rather they talked about war, violence and the bitter truth of real life.

Around three decades before, after the coming of the environmentalists, some scholars and artists recognized the vacancy of Nature in art and decided to reconcile to it. In this way, they

found a new approach and called it Eco-criticism, which, as Glotfelty (1996) states: "is the study of the relationship between literature and the physical environment" (p.18). Glotfelty (1996) believes that eco-critics study the environmental conditions of an author's life or what happens in his or her imagination "the influence of place on the imagination- demonstrating that where an author grew up, traveled and wrote is pertinent to an understanding of his or her work" (p. 13).

Eco-criticism has a great affinity with other fields as environmental studies, American transcendentalism and the study of nature in romantic era which focuses on the study of real and physical world and the effect of human being on it. It generally tends to focus on the following themes as the role of nature in the poem, the function of place in the novel, land metaphors, the idea of the garden, and the language of tourist materials. In this way, many writers in different eras attempted to depict nature in different forms in different literary genres in order to provide an eco-critical attention.

So many of them are regarded as nature writers as William Wordsworth (1770-1850) and Samuel Taylor Coleridge (1772-1843) in England, Ralph Waldo Emerson (1803-1882) and Henry David Thoreau (1817-62) in the transcendental America and many other writers up to now. The Canadian Margaret Eleanor Atwood was born in 1939, and is considered as one of Canada's leading contemporary writers. She was famous as being both a poet and a novelist in her career.

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Most of her novels won a prize as her dystopian novel *The Handmaid's Tale* (2006); *The Blind Assassin* (2010); *Alias Grace* (2011). In her novels as *The Handmaid's Tale* (2006), *Oryx and Crake* (2003) and *The Year of the Flood* (2009), Atwood presents possible future scenarios of the human interactions and natural world as desolate and destroyed by mankind. One can consider that Atwood's novels offer a "lens focusing ... on the world around her" (Staines 2006: 15).

In this way she focuses the lens of her literary talents on prevalent themes as the endangered balances between Nature and Man's technological creations in arts and science, and between women and men in such a postmodern era. She deliberately investigates to makes us find answers to the position of human being in nature.

An author like Margaret Atwood has the potentiality to be considered eco-critically because of her elaborately presentation of post human condition regarding the ecological disaster and anthropocentrism in post modern era and beyond. Atwood's concern with ecological preoccupations is not exactly new. Almost all of her fiction questions man's relation to his environment and consequent survival or extinction. Here are just a few examples: The title of her 2010 novel *Life Before Man*, and her bestselling novel *Surfacing* (2009), focus on strong impact on the environmental awareness of North-Americans. She has also written a children's book entitled *For the Birds* (1990) in order to raise children's awareness on the protection of wildlife. In this way Atwood's *Oryx and Crake* is going to be interpreted on the basis of two highly issued themes in the history of literary interpretation as eco-criticism and anthropocentrism.

METHODOLOGY

Eco-criticism as its name denotes, is about eco, or better to say nature. It is a theory which is about the relationship between nature and everything and especially human being, whether our behaviors, our feelings and our or our mental and imaginary productions has literature. Identity has a close-knit relationship with the place we live in. Belonging to a place does not necessarily mean to be born in it.

It can be the place from which you take inspiration and identity. A place, whether big or small,

is a very small member of the great family of nature. It can change your identity and impress your behavior. It can be regarded as the place in which human being is in centre. In this way nature and human being has a mutual relationship. In this way nature can be so influential in identifying our identity. Concentrating on the critical studies on Margaret Atwood, most of the critics identify her as a post human author. But this research aims to look upon her in a new way. The purpose of this research is to consider and identify her as an eco-critical author, who cares about nature, the environmental place, the position of human being in nature, and consequently her attitudes toward nature will be issued.

Literature Review

There have been different researches, and interpretations of the life and literary works of Margaret Atwood so far, but it can be stated that the researches on the basis of eco-criticism and Anthropocentrism generally and their applications and practices on this writer and her works, particularly are rare. Of course, one can deal with some traces of familiar researches in these fields, but focusing on these theories one can find that there is a lot to talk about them generally and in some cases in particular.

Steiner (2010) traces the developments of the moral status of animals in Western philosophy. He elucidates the fact that the anthropocentric claims which still disturb us today are not new. He teases out the developments of our anthropocentric view that we are somehow superior to non-human animals, while at times providing brief glimpses of dissent in philosophers who challenged the claims of superiority. He takes a look at contemporary debates on the status of animals to highlight some of the problems with current theories.

He then goes back to the ancient Greeks, beginning with Homer, putting a great deal of emphasis on Homer's reluctance to divide the world into humans and animals, showing continuity between the human and the animal. His ideas have its origins in Aristotle and realization with the Stoics and their absolute certainty that animals are not rational. He rights up to the twentieth century and covers figures such as Descartes, Kant, Rousseau, Mill, Darwin, Heidegger, Derrida, and many more.

Heise (2006) studies the issues that concern environmentally oriented criticism, one of the most recent fields of research to have emerged from the rapidly diversifying matrix of literary and cultural studies in the 1990s. The writer deliberately focuses on eco-criticism, a rapidly growing field of literary studies. He studies the development of literary theory between the late 1960s and the early 1990s and reaches to this conclusion that eco-criticism's engagement with modernization has been partly shaped by environmentalist's ambivalence toward scientific inquiry because eco-critical work encompasses many literatures and cultures and it would also stand to gain from a closer engagement with theories of globalization.

Wendy Wheeler (2008) offers a brief contextualization of eco-criticism amongst other critical 'isms', followed by an introduction to a theoretical framework which he suggests may prove fruitful to eco-critical and eco-phenomenological theorizations. He involves a limited discussion of Peircean semiotics and the semiotic theories, including bio-semiotics itself, which both flow from it and also joins it to general evolutionary systems theories. He focuses on Peirce's discussion of inferential logic, and especially on his logic of abductive reasoning. Finally, he asks what bio-semiotic understandings might have to add to earlier critical ways of seeing, and try to begin to offer the beginnings of an answer via a brief consideration of two essays, one on romanticism and one on realism.

Johns-Putra (2010) calls for a rapprochement between eco-criticism and what it often disregards as theory. Specifically, the researcher argues for the relevance of genre theory, which explores the dynamic relations of author, reader, text, and the worlds they inhabit. Texts are locatable within the environment of a given genre; further, generic environments reciprocally shape, structure, and determine our sense of the wider environment. In this study, the researcher offers a generically inflected reading of Kim Stanley Robinson's *Science in the Capital* trilogy, in which the representation of climate change is understood as a complex set of negotiations within the generic space of utopian science fiction.

Van Steendam (2010) says that Margaret Atwood's *Oryx and Crake* deals with the last human survivor of a man-instigated world-wide plague. He believes that the novel raises many questions about our current condition in a world

dominated by capitalism, scientific enhancements and social injustice. Then, he will show how Atwood uses and abuses the typical characteristics of three literary genres that are renowned for their social criticism, as *Oryx* and *Crake* can be regarded as an ironic inversion of the major traits of Gothic fiction, science fiction and dystopian fiction. After that he will discuss both the novel's epigraphs and the function they serve when viewed in relationship to each other, drawing on Genette's paratextual theory of peritexts. And finally, he will discuss what he considers to be the novel's three most vital hypotexts.

Environmental Concern

Atwood's representations of nature and his ecological attitude toward nature in his works are of significant consideration. Atwood's ecological consciousness from an eco-critical perspective suggests a way to a better grasp of Atwood, who concerns more about the interconnection between human and the nonhuman rather than man's mastery over other forms of life. With the development of environmentalism in the late 20th century, more and more readers throw focus on the philosophical ecological implications reflected in her works.

The author herself is a scholar with keen ecological consciousness and shows deep concern on the endangered environment. In *Surfacing*, Atwood's best-known novel, from the perspective of eco-criticism, probing the profound ecological implications reflected the relationship between human-nature relationships in this work. Atwood just uses the exaggeration of the narrator's incredible lifestyle to indicate others to hear the story and learn their own ways to live harmoniously with nature. The special value of Atwood in the novel lies in the relationship between nature and human in the technological society.

However, Atwood's concern with ecological preoccupations is not something new. Almost all of her fiction questions man's relation to his environment and consequent survival or extinction. Here are just a few examples. *Life before Man* (2010) is echoed by a recent article entitled "Life after Man". Atwood's bestselling novel *Surfacing* (2009) had a strong impact on the environmental awareness of North-Americans.

The author also wrote a children's book entitled *For the Birds* (1990) in order to raise chil-

dren's awareness on the protection of wildlife. Even the bestselling novel *The Handmaid's Tale* (2006), which is a warning against theocracies, made a reference to a place in North America, a kind of no man's land, described as an environmental hell, to which the opponents to the regime were sent. This explains why *Oryx and Crake*, which describes this living hell in many details is often considered an outcome with a more ecological inclination.

The setting of *Oryx and Crake* (2003) in a twentieth century background focuses mostly on the environmental questions such as global warming, pollution, over-population, social inequalities in relation to the environment, the alteration and depletion of natural resources, and bio-engineering in a world ruled by technology.

Atwood has presented a clear fictional estimate of the violence related to the use of machines in the modern world. As in *The Edible Woman* (2012), so in *Surfacing* (2009), a woman's personal, human emergence of an eco-ethical consciousness is symbolical of the crucial act of human conscience that might yet serve, in a positive way, to sustain the fragile relationship between ecology and human life harmed dangerously by man himself. Destruction of ecological balance due to man's greed and violent nature made women barren and the Handmaids had to suffer the consequences of such atrocities in Atwood's fictional work *The Handmaid's Tale* (2006) which makes her fiction a critique of both our culture and the politics of exploitation of human and non-human lives and the environment, existing today.

Oryx and Crake as a novel, is symptomatically different from Atwood's earlier production. For the first time, Atwood depicts a male protagonist. So far, all the main characters of Atwood's novels were intricate, tortured female figures. Thus, the presence of a male protagonist in this last novel indicates the amplification of Atwood's discourse. The writer here shows how humanity as a whole becomes paralyzed by environmental decadence.

Furthermore, like *The Handmaid's Tale*, *Oryx and Crake* presents us with an apocalyptic vision of our near future. However, events in *The Handmaid's Tale* were inspired by abuses during World War Two, or current abuses of women in distant countries. In *Oryx and Crake*, Atwood found her inspiration in already existing scientific developments that gradually shape our West-

ern world in the present. The dangers described in the novel are therefore far closer to us than in *The Handmaid's Tale*. However, the narrative also offers an optimistic note.

Nature versus Human Being

At the commencement of the novel in the chapter titled '*Mango*', we can see that the novel has been started by the name of 'snowman' which can be a true and perfect evidence of the centrality of human being in this novel and through the world; "Snowman wakes before dawn. He lies unmoving; listening to the tide coming in, wave after wave sloshing over the various barricades, wish-wash, wish-wash, the rhythm of heartbeat" (Atwood 2003: 11).

But it is not all the issue, because we can see that exactly after this consideration we are confronted with hostile and forceful maneuvering of sea tides to the shore which makes a tremendous voice and introduces the forceful existence of nature. As we continue some more sentences the reader is confronted with two issues that can be influential in giving birth to this idea that people on land feel fear. First, we can see some descriptions about a conflict between nature and humanity. Nature naturally attacks the constructions which are built by human beings on the shore. The descriptions of the shrieks of birds and ocean grinding on the one hand and the construction of huge towers and barricades by various objects as bricks and the wrecks of cars and other devices in order to act against the attach and moving forward of the water at sea on the other hand:

"The offshore towers stand out in dark silhouette against it, rising improbably out of the pink and pale blue of the lagoon. The shrieks of the birds that nest out there and the distant ocean grinding against the ersatz reefs of rusted car parts and jumbled bricks and assorted rubble sound almost like holiday traffic" (p. 12).

Later throughout the novel we observe that this discriminative behavior of the nature to Snowman is continuous to the end as it is described as "Noon is the worst, with its glare and humidity. At about eleven o'clock Snowman retreats back into the forest, out of sight of the sea altogether, because the evil rays bounce off the water and get at him even if he's protected from the sky, and then he reddens and blisters" (p. 45).

When Snowman is living in a setting that the exact time and place is not only dim and obscure to the reader and also for himself; "zero hour it causes a jolt of terror to run through him, this absence of official time. Nobody knows what time it is" (p. 12), shows that human being is living in a senseless situation and one can refer to the existential and nihilistic approaches in literary interpretations which significantly focusing on the likelihood of the position of man on earth. In this way we can reach to this point that human being is situated in a surrounding that is endangered by the various types of natural entities as forceful splashes of sea water and 'bug bites' which 'Surprisingly what a sharp sting' they can give, especially the 'yellow ones' makes snowman in this novel scratch his bug bites. And the fear which makes him to sleep in the trees and "[scanning] the ground below for wildlife: all quiet, no scales and tails" (Atwood 2003: 12). All the mentioned issues clarify this fact that human being is in danger of natural and environmental attacks.

Nature has always been kind and helpful to human being and has always provided life necessities and facilities in a way most of the environmentalists and eco-activists regard Earth as "The Mother Earth". Focusing on this idea there would be a contrast why Earth, nature and ecology will be hostile to human being. The answer to this question needs thinking, but some traces of it in the novel may lead us to some points. When Snowman is sitting on a tree branch and drinking his mango juice he is "in under the shade of the trees because of the punishing sun, for the children – thick-skinned, resistant to ultraviolet – he's a creature of dimness, of the dusk" (p. 14). This all shows the kindness and usefulness of nature to human being and many other traces which we will elaborately discuss in this section.

One thing related to the prevalent discussion is that in this era that Snowman is living, the current generations do not have any information about old ideas; because they are the outcome of some scientific experiments and are not natural human beings and they are called Crakers which are made by the scientist Crake. For example, the children listen carefully to Snowman's words and believe him as a god or savior who has a great range of knowledge and information. When they call his name, 'Snowman' and regarding the word 'snow' they never have seen snow in their life. When Snowman answers them

about some rules in names which these rules were created by Crake, he tells the story of The Abominable Snowman:

"The Abominable Snowman – existing and not existing flickering at the edges of blizzards, apelike man or manlike ape, stealthy, elusive, known only through rumors and through its backward-pointing footprints. Mountain tribes were said to have chased it down and killed it when they had the chance. They were said to have boiled it, roasted it, held special feasts; all the more exciting, he supposes, for bordering on cannibalism" (p.16).

In this way and according to the story which amused the children for a while and made them to be silent, confused, and thinking, we reach to this point that the killing of The Abominable can be considered as one of the other actions of human beings to nature. However, nature has always been kind and it has tried to keep herself alive; for example, when the children were collecting garbage out of the shore which came by sea to the land we can see a natural entity like sea for saving itself tries to give back the things that human being has thrown to the sea.

However, when sea throws the manmade things out and they gather them, they are all useful in order to be used in that plagued era which there is nothing to do and is created for continuing life. Snowman couldn't do anything in order to make a shelter for himself from the nature's attack. When sea throws the manmade things out and they gather them, they are all useful in order to be used in that plagued era which there is nothing to do and are created for continuing life. Snowman couldn't do anything in order to make a shelter for himself from the nature's attack. He could use a tube of heavy-duty sun block, supposing he could ever find one. At first he made himself "a lean-to, using fallen branches and a roll of duct tape and a plastic tarp he'd found in the trunk of a smashed-up car" (p. 45).

In spite of all his effort he was not safe. The first night he had been attacked by ants, and so he had filled four tin cans with water and stuck the cot legs into them. That put a stop to the ants. Not only the ants were dangerous for him, he was not secure from the rakunks attacks, which are genetically made animals through scientific experiments and now they are free on earth after the destruction of the laboratories; "the rakunks, scuffling through the leaves and sniffing at his toes, nosing around him as if he were already

garbage; and one morning he'd woken to find three pigeons gazing in at him through the plastic" (p. 46).

This is true that religion, philosophy and science has always been of the components of anthropocentrism; it does not mean that he has been successful and has tasted the sweetness of this centrality. Human being is a creature that must be engaged with other beings and in this way it is called a social creature. On this backdrop, nature and the environment can be regarded as good participants in this process. It means that there has been a mutual need for each other between them, but because of the prevalent hostility between them, they have always been in clash and conflict together and the sense of loneliness was forceful in this way.

When the human is alone, he needs another party for communication. As it is shown in the novel, Snowman is alone and "he feels the need to hear a human voice – a fully human voice, like his own" as he says "Now I'm alone," he says out loud. All are alone; Alone on a wide sea. One more scrap from the burning scrapbook in his head. Revision: seashore. Mermaids will rise from the waves, out there beyond the crumbling towers, and he'll hear their lovely singing and swim out to them and be eaten by sharks" (p. 20).

Traces of Loneliness

The description of loneliness has been spread out throughout the novel as later we can observe about emptiness of this feeling. But sometimes this loneliness is better than being in the company of others because in such a harsh situation the existence of others may be so dangerous for him and his position. As we can see at the end of the novel Snowman is unwilling to tune the radio in order to communicate with a person behind the line and he is not interested in communicating with those three men who appeared at the end of the novel by the ocean.

Snowman is in a complete opposition and conflict with nature, especially the sea, in a way that he tries to condemn it, however, this internal stress is somehow useless because nature will do as its will: "You did this! He screams at the ocean. No answer, which isn't surprising. Only waves wish-wash. He wipes his fist across his face, across the grime and tears and snot and the derelict's whiskers and sticky mango juice. Snowman, Snowman, he says: Get a life" (p. 21).

This is true that we are supposing this clash and treatment of the nature and humanity regarding the opposition. But it is inevitable to believe that they were friends together. Happiness, love, kindness are the concepts that can be attributed to the intimate relationship of nature and human beings. As the novel points out about the smiling face of a duck, "He was wearing red rubber boots with a smiling duck's face on each toe; he remembers that, because after seeing the bonfire he had to walk through a pan of disinfectant in those boots. They'd said the disinfectant was poisonous and he shouldn't splash and then he was worried that the poison would get into the eyes of the ducks and hurt them" (p. 23).

And the sense of being anxious and worried about animals when they are burned is something which bothers Snowman. When the scientists burn the animals through their experiments in a way that they look like steaks and sausages make Jimmy, the real name of Snowman when he was a child, to be sorry about them and believed that it is his fault, "he thought he could see the animals looking at him reproachfully out of their burning eyes. In some way all of this was his fault, because he'd done nothing to rescue them. At the same time he found the bonfire a beautiful sight" (Atwood 2003: 26).

As it is clear in the second chapter of the book which illustrates the burning of the animals in a bonfire and Jimmy's sense of sympathy toward them, one must accept this idea that Jimmy didn't know that the burning of animals is useful and preventive for humanity because at that time an issue was prevalent. The issue of the disease which Jimmy is unaware of it 'What's a disease'? His mother tries to make him aware of the meaning of disease and its harmful effect on humanity and why it is important to burn them in order to eradicate the widespread of the disease:

"They slowed down then stopped. Then his mother was talking to him in the quiet, nice-lady TV-teacher voice that meant she was furious. A disease, she said, was invisible, because it was so small. It could fly through the air or hide in the water, or on little boys' dirty fingers, which was why you shouldn't stick your fingers up your nose and then put them into your mouth, and why you should always wash your hands after you went to the bathroom, and why you shouldn't wipe. ... His mother acted as if she hadn't heard him. A disease, she continued in that calm, stretched voice, a disease got into you

and changed things inside you. It rearranged you, cell by cell, and that made the cells sick. And since you were all made up of tiny cells, working together to make sure you stayed alive, and if enough of the cells got sick, then you . . ." (Atwood 2003: 29-30).

The Pigeon Organs

Nature and human being opposition has been due to human effort for keeping his existence in different eras and by the birth of new scientific development. As a scientific novel, Atwood focuses on human being endangered on Erath after the outbreak of some disease which made them do some activities under project titles in order to facilitate their survival. In the beginning of the novel a project called pigeon project is introduced in which human tissue organs are produced out of experiments on pigs' organs which are able to defend the body against the attacks of opportunistic microbes and viruses.

In this process, the pigeon organs are customized by using some cells from individual human donors. When they are ready, they are frozen to be used in necessary situations. Indeed, these organs were kept in the body of pigeons in order to be transplanted easily when it is necessary when they get older. They were so much important that "They were kept in special buildings, heavily secured: the kidnapping of a pigeon and its finely honed genetic material by a rival outfit would have been a disaster" (p. 35).

Nature is getting devastated, by the passage of time, the coastal aquifers turned salty and the northern permafrost melted and the vast tundra bubbled with methane, and the drought in the mid-continental 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. In this way people were living in some complexes that were guarded under strict security measures out of cities:

"Compound people didn't go to the cities unless they had to, and then never alone. They called the cities the pleeblands. Despite the fingerprint identity cards now carried by everyone, public security in the pleeblands was leaky: there were people cruising around in those places who could forge anything and who might be anybody, not to mention the loose change – the addicts, the muggers, the paupers, the crazies. So it was best for everyone at Organic Farms to live all in

one place, with foolproof procedures" (Atwood 2003: 36-7).

Jimmy found out that why they do not go to the cities when he was a child and under the education of his mother. His mother told him about the devastating micro organism which are living in nature and have overcome the ecosystem. She told him that microbes and viruses want to get in through the cell doors and eat up the pigeons from the inside. In this way, she showed him pictures of the microbes, pictures of the microbes getting into the cells and infecting them and bursting them open, close-up pictures of the proteins, pictures of the drugs she had once tested.

We can see that through the ages human being has done different experiments on micro-organism. He has used them and changed them with different scientific approaches that now they have changed to a great threat to humanity. So human being again tries to make new ways to eradicate the harmful organisms. By the eradication of these organisms nature will lose some qualities which were vital for the human being. In this way gradually nature shows its hostility to humanity and the centrality of human being in this regard. Jimmy's mother acts a little seriously that makes jimmy search about some secrets in her mother's life. His mother was so angry to him, especially when he wanted to play with some animals. We can refer to her reacting to Jimmy's idea about a little sister or brother:

As he grew older and more devious, he found that on the days when he couldn't grab some approval, he could at least get a reaction. Anything was better than the flat voice, the blank eyes, the tired staring out of the window. "Can I have a cat?" he would begin. "No, Jimmy, you cannot have a cat. We've been over this before. Cats might carry diseases that would be bad for the pigeons." (p. 42).

His mind is so engaged with his situation and his loneliness. One morning when he gets up he sees a rakunk near him looking at him with bright eyes under a bush. He tries to communicate with her and believes that "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" (p. 56) but he was not successful to tame her.

Human being through scientific experimentations and reaching to new developments and giving birth to new technologies not only has devastated natural order and the environment,

but also he has provided various ways for his own destruction. As we can see in the story the destruction of humanity has been due to a widespread virus which got released by the humanity. Jimmy learned this from his father, which he elaborately provides him an example about the widespread of a virus by a woman and its subsequent worries:

"Jimmy's father said there'd been an incident only a few weeks before they'd moved in – some fanatic, a woman, with a hostile bio-form concealed in a hairspray bottle. Some vicious Ebola or Marburg splice, one of the fortified hemorrhages. She'd nuked a guard who'd unwisely had his face mask off, contrary to orders but because of the heat. The woman had been spray-gunned at once and neutralized in a vat of bleach, and the poor guard had been whisked into Hot Bio-form and stuck into an isolation room, where he'd dissolved into a puddle of goo. No greater damage done, but naturally the guards were jumpy" (Atwood 2003: 60-61).

Later, Jimmy regardless his mother caution and worries has made a relationship with an animal and he was very happy with it. Each night after doing his homework or searching on the web, he got into the bed and quietly and also carefully, because Killer, that small animal, was in there. The animal was happy there. Jimmy was happy with her and always put his head under cover and laughs silently to her. But one day when he got home there was no animal there and Jimmy found a letter which was written by his mother and at the end his mother had mentioned: "I have taken Killer with me to liberate her, as I know she will be happier living a wild, free life in the forest" (p. 69).

Throughout the novel in different parts which try to show the position of human being in their places we see that the writer tries to depict the position of man in way that human being is living under strict security measure in a way that he is afraid of something or under that threat of some natural or supernatural forces and we can observe in the novels the security has tightened them securely: "in the Compounds the lid was screwed down tight. Night patrols, curfews for growing minds, sniffer dogs after hard drugs." (p.82) all this security measure is not only to defend human being out of internal threat, but also out of external threat that can be made by nature and natural environment or ecosystems as well.

As we can see natural disasters and the destruction of nature can also be threatening and harmful ~~for~~ to human being and could be effective in human life. When a disaster come which can be due to the effect of human being heedless in this case we can see that human being is miserable in perceiving this disaster and as Atwood mentions, "But everyone's parents moaned on about stuff like that" (p. 71) based on the described disaster:

"There were the things his mother rambled on about sometimes, about how everything was being ruined and would never be the same again, like the beach house her family had owned when she was little, the one that got washed away with the rest of the beaches and quite a few of the eastern coastal cities when the sea-level rose so quickly, and then there was that huge tidal wave, from the Canary Islands volcano. (They'd taken it in school, in the Geolonomics unit. Jimmy had found the video simulation pretty exciting.) And she used to snivel about her grandfather's Florida grapefruit orchard that had dried up like a giant raisin when the rains had stopped coming, the same year Lake Okeechobee had shrunk to a reeking mud puddle and the Everglades had burned for three weeks straight" (p. 71).

Anthropocentrism versus Eco-criticism

The centrality of human being or Anthropocentrism versus in Eco-criticism is more significant in this novel; because there are many chapters that we cannot trace signs and depictions of nature or natural sceneries there. In a chapter which focuses on the Crake, the scientists, the concentration will go towards Jimmy's mother disappearing in the novel, which can be regarded as the focus on human being. We are depicted about the investigation of jimmy by two cast-iron CorpSeCorps women, which continue to the end of the story as well. We can observe that human being does everything and tries hard to tame nature and change it to what he likes for his relaxation and afterwards purposes. For example as we can see in this complex where Jimmy is living they have reared dogs as patrols in a way that they act fiercely:

Night patrols, curfews for growing minds, sniffer dogs after hard drugs. Once, they'd loosened up, let in a real band – The Pleebland Dirtballs, it had been – but there'd been a quasi-riot, so no repeats. No need to apologize to Crake,

though. He was a Compound brat himself, he'd know the score (p. 82).

These dogs which to some extent are tamed and are systematized to take care of the human being but as we later observe in the novel they can be dangerous for human beings which were once at the centre of the world. In the following conversation between Jimmy and Crake we can see that Atwood wants to make the reader aware of this fact that this is true that animals which are produced in the hands of human beings by experiments and scientific evolutions can be threatening to human beings because it is the nature of nature:

They were standing in front of a series of cages. Each contained a dog. There were many different breeds and sizes, but all were gazing at Jimmy with eyes of love, all were wagging their tails. "It's a dog pound, said Jimmy. Not quite, said Crake. Don't go beyond the guardrail don't stick your hand in. They look friendly enough said Jimmy. His old longing for a pet came over him. Are they for sale? They aren't dogs, they just look like dogs. They're wolvogs, – they're bred to deceive. Reach out to pat them; they'll take your hand off. There's a large pit-bull component. Why make a dog like that? Said Jimmy; taking a step back. Who'd want one? It's a CorpSeCorps thing, said Crake. Commission works; a lot of funding. They want to put them in moats, or something. Those walls and bars are there for a reason, said Crake. Not to keep us out, but to keep them in. Mankind needs barriers in both cases" (p. 230).

This is true that we are to depict all the disastrous and ugly interactions and relationships between human being and nature in this novel because our approach in the beginning was to show hostility; but one issue is inevitable that the juxtaposition of human to human kindness and human to nature kindness are of significant importance. In this novel, there are some times that human being is kind to human being and some time that they are not happy and kind together. For instance, when Jimmy sees Oryx for the first time in a porn website, he had such a kind of feeling in his heart as he knows her for a long time.

But things are not always that. This is true and confidential that we can see that this sense of love and affinity lasts until the end of the novel, but the human being has always been dangerous to human beings because in a system

when nature and human beings are in a clash with each other, human to human interactions can also be dangerous. However, Jimmy's feeling was somewhat different as depicted in the novel, but it has its own sequences till the end of the novel and it has its own meaning:

"This was how the two of them first saw Oryx. She was only about eight, or she looked eight. They could never find out for certain how old she'd been then. Her name wasn't Oryx, she didn't have a name. She was just another little girl on a porno site" (p. 100).

Again, as we go ahead the power and strength of natural governing forces will show itself in a novel that can convey the governing power of nature in the novel. However to what extent the writer has tried to depict the beauty of nature, she has tried to depict the inability of human being in interaction with nature:

A breeze ruffles the leaves overhead; insects rasp and trill; red light from the setting sun hits the tower blocks in the water, illuminating an unbroken pane here and there, as if a scattering of the lamps has been turned on. Several of the buildings once held roof gardens, and now they're top-heavy with overgrown shrubbery (p. 106). As we see in this part when snowman tries to kill the rabbit, he is so hostile and he tries to do it out of natural orders. All these show the inability and loss of human being and lack of the power of thinking.

"Across the clearing to the south comes a rabbit, hopping, listening and pausing to nibble at the grass with its gigantic teeth. It glows in the dusk, a greenish glow filched from the iridocytes of a deep-sea jellyfish in some long ago experiment. This one has no fear of him, though it fills him with carnivorous desires: he longs to whack it with a rock, tear it apart with his bare hands, then cram it into his mouth, fur and all. But rabbits belong to the Children of Oryx and are sacred to Oryx herself, and it would be a bad idea to offend the women" (Atwood 2003: 107-108).

After the widespread of the virus and the destruction of humanity on earth, Snowman who is regarded as one of the existing remainders of this calamity set off to find some food and decides to go back to the laboratories and complexes which he has escaped from then. During his trip Margaret Atwood is going to depict some scenery to the reader to show human being is inferior in the ecosystem and the environment.

Atwood masterly and through unique depiction tries to show us that human being is endangered in nature. And this situation is created just by human reaction to the nature:

"It's nine in the morning, sun clock, by the time Snowman leaves the Fish Path to turn inland. As soon as he's out of the sea breeze the humidity shoots up, and he attracts a coterie of small green biting flies. He's barefoot – his shoes disintegrated some time ago, and in any case they were too hot and damp – but he doesn't need them now because the soles of his feet are hard as old rubber. Nevertheless he walks cautiously: there might be broken glass, torn metal. Or there might be snakes, or other things that could give him a nasty bite, and he has no weapon apart from the stick" (p. 183).

Biometric Experimentation

Let us change the direction toward how human beings by progress and development have tried to change the natural order of life by biometric experimentation. These experimentations just does not lead to make bio organs for future usage or making some animals for the purpose of making food at the time of extinction but also to fake rocks and rain and finally to human being itself; human being has tried to make fake rocks which are made from "a combo-matrix of recycled plastic bottles and plant material from giant tree cacti and various lit hops" (p. 222). The fake rocks looked like real rocks but weighed less; this is worth considering that these productions are all for making life easy. But generally they are a distortion in nature. Now take a look at the depiction of fake rain production by human being:

"Crake led Jimmy along and around; then they were standing in front of a large picture window. No: a one-way mirror. Jimmy looked in. There was a large central space filled with trees and plants, above them a blue sky. (Not really a blue sky, only the curved ceiling of the bubble-dome, with a clever projection device that simulated dawn, sunlight, evening, night. There was a fake moon that went through its phases, he discovered later. There was fake rain" (p. 332).

The production of fake and artificial things didn't lead to artificial rocks and animals, but we see that fake humans, which were called Crackers were made in the Par dice laboratory and which are remained as the remainder of human

generation on earth after the destruction of humanity. Crake is showing them to Jimmy as depicted here:

What Jimmy had seen was the next-to-end result of seven years of intensive trial and-error research." At first," said Crake, "we had to alter ordinary human embryos, which we got from – never mind where we got them. But these people are *sui generis*. They're reproducing themselves, now." "They look more than seven years old," said Jimmy (p. 333).

Experiment can be only the reason for human destruction. We know in this novel human being is devastated just because of development and progress in scientific approaches. Human being disregards natural environment and always has tried to hide the leftovers of his products and trashed in the natural environment regardless of their poisonous and destructive effects on his life. As snowman is walking in search of food he can see the trashed pleebland boulevards and avenues and roads and streets which are full of wrecked solar cars some burnt out, some standing intact as if temporarily parked (p. 246).

Although after the destruction of human being and human life by human being himself, we observe that nature also has experienced this destruction in its cycle. But nature is not completely destroyed; because nature has always tried to preserve itself beyond human hostile effort in its destructions. As Atwood tries to depict in the novel, in the destroyed city and man-made structures and how he has shown the sprouting of weeds and plants out of the destroyed things.

During this trip, which snowman has made in search of food we are not only shown the natural centrality on the one hand and the loneliness of human being on the other side, but also we can see that nature is still hostile to human being because of the disaster which human beings made on the nature and natural system of the environment. This time Atwood depicts this centrality and power through a storm which is gathering momentum in the evening:

"Dark clouds have come boiling up from the south, blotting out the sun. This isn't the usual afternoon storm: it's too early, and the sky has an ominous greenish-yellow tinge. It's a twister, a big one.... The advance winds hit, stirring up debris on the open field. Lightning zips between the clouds. He can see the thin dark cone, zig-zagging downwards; then darkness descends.

Luckily the checkpoint is built into the security building beside it, and those things are like bunkers, thick and solid. He ducks inside as the first rain strikes. There's a shrieking of wind, a crashing of thunder, a vibrating sound as everything still nailed down hums like a gear in a giant engine. A large object hits the outer wall. He moves inward, through one doorway and then another, scrabbling in his garbage bag for the flashlight" (Atwood 2003: 262-63). And the howling sound outside which can be regarded as the symbol of the power of nature in order to frighten the weak and alone human:

"From outside comes the howling of the wind, an unearthly noise like a huge animal unchained and raging. Gusts are coming in, past the doors he's closed, stirring up the dust; everything rattles. His hands are shaking. This is getting to him, more than he's allowed himself to admit" (Atwood 2003: 264).

Disaster as the Final Result

Before the destruction of human being by his own hands, all the news all over the world were broadcasting news in which the main focus was about human destruction out of natural disasters. These disasters came upon human being are the result of the hostility of nature toward human being which is indeed the reflection of human being himself "Or he'd watch the news: more plagues, more famines, more floods, more insect or microbe or small-mammal outbreaks, more droughts" (p. 280).

Let us have a flashback in the novel, to see what has happened to human being and what the reason of human destruction was. All things that caused this destruction were a pill which was produced chemically by Crake and for the sake of human being. But not only was not useful, but also it made the breakdown and loss of humanity in the hands of human beings. In this way Atwood clearly depicted this image that human being has distorted the natural order of life by making a pill called 'The BlyssPluss Pill' which had some characteristics as protecting users against sexually transmitted diseases which were fatal and inconvenient; provides an unlimited supply of libido and sexual prowess and would prolong youth which:

"[it] was designed to take a set of givens, namely the nature of human nature, and steer these givens in a more beneficial direction than

the ones hitherto taken. It was based on studies of the now unfortunately extinct pygmy or Bono-bo chimpanzee, a close relative of *Homo sapiens*.

The BlyssPluss Pill would also act as a sure-fire one-time-does-it-all birth-control pill, for male and female alike, thus automatically lowering the population level. This effect could be made reversible, though not in individual subjects, by altering the components of the pill as needed, that is, if the populations of any one area got too low" (Atwood 2003: 323-324). The purpose of making this pill at first was saving humanity and prolonging the quality of life but it acted vice versa, and become the destructor of human being in the world and resulted in the destruction of nature and the natural environment.

Human being as a rational and emotional being has always involved in the process of falling in love and lovemaking. This does not end to sensual and sexual relationship between two genders, but human being needs others for communication and removing the sense of loneliness. In the course of the novel when Snowman is alone nature tries to demonstrate its power on the ground and make a sense that the human being is inferior to the power of nature. Atwood has depicted this phenomenon beautifully and masterfully in a description as:

"The lightning sizzles, the thunder booms, the rain's pouring down, so heavy the air is white, white all around, a solid mist; it's like glass in motion. Snowman – goon, buffoon poltroon crouches on the rampart, arms over his head, pelted from above like an object of general derision. He's humanoid, he's hominid, he's an aberration, he's abominable; he'd be legendary, if there were anyone left to relate legends" (p. 338).

The novel is taking place in five different times, which are connected together by some flashbacks and foreshadowing. Now, after all these scattered descriptions of the situation of humankind on earth versus the centrality of nature, let us take a look back to the time when the outspread of the disease started to scatter all over the world and how it gradually destroyed human being on earth and eradicated Anthropocentrism in this case. When Jimmy was visiting Crake in the Paradise complex they were informed about the outspread of the virus all over the world.

It was not just the widespread of a disease but also its consequent effects on the human

body. The experiment was a fault which leads to a disaster. Atwood makes the reader aware of the possible effects of being heedless to the natural order of life in nature as Glotfelty (1996) insisted about this issue in his approach in literary interpretations of the eco-criticism which tries to make a balance between the position of man and nature in the world altogether. As in the story we observe the symptoms of the effect of the virus was so harmful that makes a disgusting feeling for the reader who imagines the situation currently:

"The symptoms were high fever, bleeding from the eyes and skin, convulsions, then breakdown of the inner organs, followed by death. The time from visible onset to final moment was amazingly short. The bug appeared to be airborne, but there might be a water factor as well" (Atwood 2003: 359).

And finally we human being confessed his fault and accept that he was responsible for this calamity. But all these regrets are useless because there is no treatment for it as Crake confess regretfully that "It was in those pills I was giving away, the ones I was selling. It's all the same cities, I went there. Those pills were supposed to help people! Crake said" (p. 359). We see that Crake as the symbol of human beings on earth unwillingly paved the way for destruction. This is the total message of the novel, which Atwood tries to be conveyed by the reader and all the efforts of eco-critics is so in this regard that a human being takes care of nature, but because he is proud of his progress he forgets for a while that in whatever condition he is living and working and unintentionally do something which results in a disaster in some dimensions in time that nothing can be done for it.

Although unaware human was responsible for the humanity destruction, but he never thinks rationally about his fault. This is true that Crake who is dead now was responsible for this disaster, but the sense of pride and Anthropocentrism is in the heart of snowman that makes Crake a significant figure in his mind and imagination:

Crake's emergency storeroom; Crake's wonderful plan; Crake's cutting-edge ideas; Crake, King of the Crakery because Crake is still there, still in possession, still the ruler of his own domain, however dark that bubble of light has now become. Darker than dark and some of that darkness is Snowman's. He helped with it (p. 366).

When the focus and concentration of the narrative is on the story of the virus spreading out and the destruction of the natural environment, we can see that the traces of nature and environmental sceneries are fainting in the novel. So Atwood is doing purposely to depict a colorless description. Indeed, there is no natural scenery and everything is destroyed by human action. Nature an independent entity tries to overtake its position and overcome the position of the destroyed mankind. Gradually toward the end of the story the natural sceneries and environmental ecosystem show themselves and try to overcome the position of the last man on earth. Snowman has lost his position and this losing is the symbol of losing the position of Anthropocentrism and replacing it with Eco-centrism:

"My name is Snowman," said Jimmy, who had thought this over. He no longer wanted to be Jimmy, or even Jim, and especially not Thickney: his incarnation as Thickney hadn't worked out well. He needed to forget the past – the distant past, the immediate past, the past in any form. He needed to exist only in the present, without guilt, without expectation. As the Crakers did, perhaps a different name would do that for him (p. 383).

In his way returning to his shelter and to Crakers, when Snowman reaches to the ocean, he observes that there is peace in nature and Crakers are happy there. The ocean also gives him food and Atwood's purpose in this regard is to depict nature as the mother of the hopeless human and to show the fact that human being is nothing without the existence of the nature:

Late in the evening, they came at last to the shore. The leaves of the trees were rustling, the water was gently waving, the setting sun reflected on it, pink and red. The sands were white, the offshore towers overflowing with birds."It is so beautiful here. "Oh look! Are those feathers? What is this place called? It is called home," said Snowman (p. 390).

CONCLUSION

Concentrating on the conflict and hostility between nature and human being under a magnifier in this novel, we can see that all the traces will sprout up automatically for us in such an interpretation. In the novel, it is obvious that we are of the destructive possibilities of a machine-dependent post human existence in the 21st-cen-

ture. In this way we are regarded as heedless beings on the earth. We are in danger of being destructed and the only way to ensure the nutrition of life, even in the post-human existence, is adoption of an eco-ethical way of life by human beings in general, and by those who derive an explicit pleasure from mind-controlled machine damage upon both human and nonhuman 'other' life, in particular.

Oryx and Crake, as a dystopic and satirical fable set in the consequences of a biotechnological apocalypse, situates itself in the more recent line of Eco-criticism which has attempted to look at how literature can influence ecology in very concrete ways. What is also new is that the link between literature and ecology does not stop here. The novel addresses the author's fears of a future in which modern science and politics will not look into the possible disastrous consequences of their own productions on ecology because of the absence of any literary influence to counter the phenomenon. Here, it is not just how literature can influence ecology that is explored but how ecology can also have an impact on literature. In conclusion, it is apparent that the survival of the human race and the world we know is situated in literary terms and the survival of literature and the survival of our world are entangled.

By writing such a kind of novel Atwood guides readers to contemplate and think about wisely about the ethical implications of their actions. So, she follows this idea that literature can shape public attitudes towards science and can have a significant didactic and pedagogic value not only for the readers, but also for politicians and students when they are involved in reading a literary text about the human condition in such a postmodern and science oriented world. She

contributes to a richer understanding and deeper appreciation of our humanity, necessary for facing the challenges confronting us in a biotechnical age.

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