Foretelling the novel coronavirus in *Margaret Atwood's*Oryx and Crake: an ecocritical analysis

التنبؤ بالفيروس التاجي الجديد في Oryx and Crake لمارغربت أتوود: تحليل اقتصادى نقدى.

Prédire le nouveau coronavirus dans *Oryx et Crake* de *Margaret Atwood*: une analyse écocritique

Doct. Soraya Chihi

Université 8 Mai 1945, Guelma

Submission date: 19-10-2021 -Acceptance date: 18-11-2021 Publication date: 29-05-2022

ملخص

ألهمت كوفيد19، الأزمة الصحية العالمية 2020 التي أثرت على جميع مجالات الحياة في جميع أنحاء العالم، ظهور وجهات نظر جديدة تجاه تفسير أعمال الخيال العلمي السابقة التي تنبأت بأزمة وبائية عالمية. الكاتبة الكندية، مارجريت أتوود، هي واحدة من بين عدد من المؤلفين الذين توقعوا كوفيد19 في عوالمهم الخيالية. في روايتها البيئية، أوريكس وكريك، ناقشت أتوود قضية تغير المناخ والتدهور البيئ بطريقة ضمنية، لقد صورت النتائج المجتملة لهذه الأزمة البيئية العالمية في عالم ما بعد المروع على غرار المعضلة الحالية التي لا تزال البشرية تعيش فها؛ تتنبأ بانتشار فيروس من صنع الإنسان في جميع أنحاء العالم تسبب في انقراض بشري عالمي ونهاية للحضارة الإنسانية. لذلك، فإن الهدف من هذه المقالة هو فحص تنبؤات مارغريت أتوود كوفيد19في روايتها أوريكس وكريك، من خلال تحليل النقد البيئي. ونتيجة لذلك ومن خلال تحويل المعطيات العلمية إلى مشاعر وتجربة في السرد الأدبي، انقود أن صحة الإنسان تقوم على كوكب سليم.

الكلمات الدالة: كورونا فيروس؛ كوفيد19؛ النقد البيني؛ مارجريت أتوود؛ أوريكس وكريك؛ خيال تغير المناخ؛ انقراض الإنسان.

Résumé

Covid-19, la crise sanitaire mondiale de 2020 qui a affecté tous les domaines de la vie dans le monde entier, a inspiré l'émergence de nouvelles perspectives vers l'interprétation d'œuvres de science-fiction précédentes qui prédisent une crise pandémique mondiale. L'auteur Canadienne, Margaret Atwood, est l'un des nombreux auteurs qui ont prévu Covid-19 dans leurs mondes fictifs. Dans son roman environnemental, *Oryx et Crake*, Atwood a abordé la question du changement climatique et de la dégradation de

l'environnement de manière implicite; elle a décrit les résultats possibles de cette crise environnementale mondiale dans un monde postapocalyptique semblable au actuel dilemme dans lequel l'humanité vit encore: elle prédit un virus d'origine humaine répandu dans le monde entier qui a provoqué une extinction mondiale humaine et la fin de la civilisation humaine. Par conséquent, l'objectif de cet article est d'examiner la prédiction de Covid-19 par Margaret Atwood dans son roman, Oryx et Crake, à travers une analyse écocritique. En conséquence, en transformant les données scientifiques en sentiments et en expérience dans un récit littéraire, Atwood confirme que la santé humaine repose sur une planète saine.

Mots-clés: Coronavirus ou Covid-19; écocritisme; Margaret Atwood; Oryx et Crake: fiction sur le changement climatique; extinction humaine

Abstract.

Covid-19, the 2020 global health crisis that has affected all aspects of life over the whole world, has inspired the rise of new perspectives towards the interpretation of previous science fiction works that foretold pandemic global crisis. The Canadian author, Margaret Atwood, is one among a number of authors who have forecasted Covid-19 in their fictional worlds. In her environmental novel, Orvx and Crake, Atwood has discussed the issue of climate change and environmental degradation in an implicit way; she has depicted the possible results of this global environmental crisis in a post-apocalyptic world similar to the current crisis humanity is still facing. In her novel. Orvx and Crake, she predicts the spread of a human-made virus all over the world that causes a global human extinction and the end of human civilization. Therefore, the aim of this article is to examine Margaret Atwood's foretelling of Covid-19 in her novel, *Oryx and Crake*, through an ecocritical perspective. I will show the way Margaret Atwood confirms, through the transformation of scientific data into feelings and experience in a literary narrative, that the human health is based on a healthy planet.

Key words: Coronavirus/Covid-19; ecocriticism; *Margaret Atwood*; *Oryx* and Crake; climate change fiction; human extinction

Introduction

The appearance of the Novel Coronavirus has changed all aspects of life from personal to public, from national to international, and from local to global. At a larger scale, human beings have felt the impact and witnessed the raising of new standards and norms of living in a world under the threat of Covid-19 caused by the Novel Coronavirus. So, is the Novel Coronavirus affecting literature, too? Since the whole world is still living the crisis, only the future carries the answer, but one



of the possible answers might be "ves." so this denotes that this virus will ultimately conquer the human imagination as well and not only the body, and writers will show their responses to this unique worldly existing situation. However, what seems to be relevant in this period, during the writing of this article, is that Coronavirus provides literary researchers with new perspectives to reread previous literary works whose writers were able to foretell and depict in their fictional worlds. Though the settings may differ, these works can be classified under the umbrella of "plague literature," and the literary history has registered many examples of writers who have forecasted the appearance of viruses, showing how such pandemics have changed the human life and the human destiny in general. These include Daniel Defoe's A Journal of the Plague (1722), Gabriel Garcia Marquez's Love in the Time of Cholera (1985), José de Sousa Saramago's Blindness (1995), Ling Ma's Severance (2018), and Albert Camus's The Plague (1947). Among them is Margaret Atwood's Orvx and Crake (2003), the case study in this article. The article's structure is guided, then, by the following questions: What is the relationship between ecocriticism and Covid-19? What is Oryx and Crake's narrative? How does Atwood imagine and depict Coronavirus, or are there any similarities generated from the current real world? Finally, what are the motives and messages behind the interpretation of the novel?

1. Ecocriticism and Covid-19

1.1 Definition and historical developments of ecocriticism

Seemingly, effects of Covid-19 are found everywhere, even in literary criticism, and more particularly in ecocriticism. Based on scientific studies, eccritic's have found a relationship between climate change and the appearance of viruses so that they have offered literary scholars' new criteria to reread and interpret the previous literary works that foretold Covid-19. So, what is ecocriticism? How has it developed? And what are the recent developments of the theory related to Covid-19?

Ecocriticism, or green cultural studies, is a literary theory that has appeared recently as part of a wider reaction to the contemporary environmental crisis. It is defined as the study of literature and environment from an interdisciplinary perspective, where researchers



examine the representation of the environment or nature in literary texts aiming to brainstorm possible solutions to improve the contemporary environmental situation. Its role is to investigate the relationship between culture and nature for the sake of taking responsibilities for the environment; thus, it has influenced the humanities over the past few decades (Barry 248). One of the recognized pioneers of ecocriticism, Cheryll Glotfelty, defines it in her book, *The Ecocriticism Reader: Landmarks in Literary Ecology*, as follows.

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

In the same book, Glotfelty poses essential questions for basic ecocritical readings such as: How is nature represented in this sonnet? What role does the physical setting play in the plot of this novel? Are the values expressed in this play consistent with ecological wisdom? How do our metaphors of the land influence the way we treat it? How can we characterize nature writing as a genre?" (xviii-xix).

interest only in the 1990s, first in the United States of America and in the United Kingdom. In the USA, it takes its literary bearings from the 19th century transcendentalist writers, such as, Ralph Waldo Emerson, Margaret Fuller, and Henry David Thoreau whose works celebrate nature, the life force, and the wilderness, and it has a celebratory tone. However, in the UK, ecocriticism is known as green studies; its origin turns back to the British Romanticism of the 1790s rather than the American transcendentalism of the 1840s; it tends to warn humanity of environmental threats emanating from governmental, industrial and commercial forces (Barry 250). However, with the recent environmental problems, such as, climate change, or the Anthropocene epoch, in which human beings have become "the dominant force on climate and environment" (Sykes et al 2), the theory tackles themes like pollution, global warming,



overpopulation, waste or nuclear disposal, climate change, deforestation.

1.2 Recent developments in ecocriticism

Recent developments in the field have been introduced by John Charles Ryan in his article, "Ecocriticism" (2020), where he links the appearance of viruses, such as Coronavirus (as he writes), to climate change, the current global environmental crisis. Ryan states that according to worldwide historical records, it has been proven that the period from 2010 to 2019 was the hottest decade the whole world has witnessed, a decade that has brought with it many factors and developments in the field of ecocriticism, new perspectives to read environmental fictional works as climate change fiction. He has mentioned various environmental catastrophic events that occurred between 2019 and 2020; he has included the 2019-20 bushfire season, which is known as the Black Summer, a sign of intensified anthropogenic climate change; during that season, between July 2019 and April 2020, more than 11,000 fires burned almost 20 million hectares in Australia and massacred thirty-four people and more than one million animals. He has also cited other factors shown in studies led by NASA and the National Oceanic and Atmospheric Administration concerning the Earth's average surface temperature; they prove that the year, 2019, was the second hottest year since 1880. a year that recorded 0.95 degrees Celsius above the twentieth-century average (2).

The other factor he has revealed is data recorded by satellites stating that during the same year, 2019, in a period of two months, Greenland in the northern hemisphere lost 600 gigatonnes of ice, which caused a global sea level rise of 2.2 millimetres (2). The other environmental catastrophic events he has mentioned are what happened in February 2020 in weather stations, where they recorded at the northern tip of the Antarctic peninsula, one of the most speedily warming places on Earth, a reading of 18.4 degrees Celsius. It was "the highest known temperature for the ice-covered continent, which contains 90 per cent of the planet's fresh water" (2) and the collapsing of the Milne Ice Shelf, Canada's largest remaining intact ice shelf, into the ocean in July 2020.



Ryan has indicated that due to scientific studies climate change is considered to be "a factor in increased human mortality from extreme heat stress, air pollution, and viral outbreaks (3). By this he has raised a very important issue linked to climate change, which is the outbreak of viruses; this same factor as he has mentioned, is acknowledged by the World Health Organization in "Climate Change and Human Health" It is stated that, "Climate change, one of the global environmental changes now under way, is anticipated to have a wide range of impacts upon the occurrence of infectious disease in human populations" (104). Ryan thinks that the World Health Organization has linked climate change to the global diffusion of infectious diseases, such as, COVID-19, which reached pandemic proportions in 2020 and will continue to impact the world in 2021 and beyond, suggesting that,

Despite its all-consuming implications for human and more-than-human communities the world over, the coronavirus pandemic nonetheless reaffirms the interdependencies between the health of people, animals, plants, ecosystems, and the biosphere as a whole. In 2020, the Black Summer catastrophe in Australia—followed by the COVID-19 pandemic, itself compounded by other upheavals of health, economy, and ecology—overshadowed a pointedly symbolic event for environmental humanists. (3)

This passage insists on the connection between the human world and the nonhuman world. It claims that the Covid-19 crisis is an opportunity for human beings to think again about their relationship with the whole biosphere because they are in a continuous connection with it; their health and wellbeing are related to the health of the planet. This idea is well reinforced as he writes with "the arrival of the emergency humanities (ASLE, Humanities on the Brink) or what might be termed the 'pandemic humanities' (4), and this is the core point of this study: How do humanities share discussions about global scientific issues? Margaret Atwood's *Oryx and Crake* is an example of how human art can anticipate the appearance of viruses due to the twenty first century environmental concerns.



2. Ecocritical analysis of *Atwood's Oryx and Crake* 2.1 *Oryx and Crake's* narrative

Since its publication, Orvx and Crake, has been become a vast area for study and has attracted the attention of both humanistic and scientific disciplines, for it tackles a number of themes that are exceptional to reflect the twenty first century's biases. It addresses questions about class and social divisions, human nature and society, industrial and social consumerism, biotechnology industry, biopower and biopolitics, genetic experimentation, ethics and research, and above all climate change and environmental degradation. Atwood's main impulse behind the writing of the novel is her anxiety towards the current situation of the whole planet and not only a specific region; thus, she addresses issues, such as, to what extend techno-scientific progress, despite its advantages, will damage both nature and human nature. Her starting point was to look for any solutions for climate change and answer a fundamental question that characterizes any science fiction work, and linked to the 'if theory': What will happen if human beings continue their anthropogenic activities? The answer for this question is conveyed in the narrative of the story. So, what is the narrative behind Orvx and Crake?

The story is about the protagonist Snowman; it is told through his own perspective in a third-person point of view. It tells his story simultaneously before and after the occurrence of a calamity that is about a human-made virus, that erases the whole world, a worldwide epidemic purposefully caused by the fictional idealistic scientist, Crake. This scientist aims at putting an end to this anthropogenic climate change and environmental degradation through eliminating the existing earthly humans and their civilization that were not merciful to nature and replacing them by a new scientifically generated human species, called the Crakers. He chooses Snowman to take care of the Crakers after the end of the world.

Thus, to imagine life after the end of the world, or after Anthropocene, Margaret Atwood uses elements of speculative fiction to combine environmental themes with apocalyptic narratives (Bracke 2-3) and depends on portraying this disaster and its aftermath. Consequently, Atwood arranges a narrative of a futuristic climate-changed world into two different time levels. She portrays a world before and a world after this pandemic takes place, portraying two



different settings, pre-apocalyptic or dystopia and post-apocalyptic. Therefore, while telling the story of Snowman's post-apocalyptic situation, the writer deliberately offers her readers flashbacks to recall Snowman's memories, observations and conversations to create a picture of the pre-apocalyptic world with all its ills. She narrates the events of what happened before this global catastrophic pandemic to show her readers that the post-apocalyptic world is the result of the pre-apocalyptic world, which was ruled by multinational corporations, whose employees lived with their families in compounds, separated from the rest of the population.

The narrative starts with the post-apocalyptic settings, which represent the end of the Anthropocene, confirming Atwood's anthropocentric perspectives. Atwood begins her story with this physical description of the environment or nature in the near-future, where Snowman, the only human survivor, who has been called Jimmy in pre-apocalypse, a son of two genetic scientists, sitting on a tree and looking at the Crakers, playing in a world after this pandemic catastrophic calamity has destroyed all humans and their civilization. In this new world, he is nearly starving; therefore, he takes the decision of going to look for food and equipment from a devastated compound called Rejuvenescence. However, the voyage to this compound is dangerous because of the threatening hybrid animals generated in the preapocalyptic era.

All along his trip to Rejuvenescence, the narration returns back to the pre-apocalyptic world where he recalls his past life, specifically, five significant stages, starting with his childhood in the Organic compound living together with his parents and how they moved to Healthwise Company where his father started working as a geographer. The other period he recalls is his teens after his parents' divorce; a period where he befriended Glenn, an intelligent science student whom he called Crake. The two boys spent their time smoking drugs and watching underground videos from subject areas, such as, live executions and child pornography, where Jimmy became charmed by a girl from Asia, he saw during one of their pornography-watching sessions. Flashbacks also take him to Martha Graham academic life. After graduation from high school, the boys separated to study in different colleges.



Crake studied advanced bioengineering in Watson-Crick, the highly respected Institute; therefore, he created the Crakers, the peaceful human-like creatures; whereas, Jimmy went to Martha Graham, the not-so-highly-respected Academy, to study humanities. The other period he recalls is his working time as librarian and his working with Crake in the Rejuvenescence compound, where he started his affair with Oryx, up to the pandemic calamity and the death of both Oryx and Crake. During that period, after realizing his first project, the creation of the Crakers, Crake passes to another one, which is the Paradise project or the BlyssPluss Pill project. Crake informed Jimmy about this project and hired him to market it for the public, telling him that it was just a kind of sexual stimulant, hiding completely the reality of the pill that would cause a worldwide pandemic. At that time. Jimmy saw his charmed Asian girl in the Crakers' habitat and knew that Crake hired her to be a prostitute for himself and a teacher for the Crakers. Jimmy started a relationship with her while keeping it secret from Crake, who sensed it gradually.

Jimmy promised to protect the Crakers if anything happened to Crake. After its public distribution, the BlyssPluss Pill caused a global pandemic that destroyed the human race except for Jimmy, who was in the enclosed Rejuvenescence compound with the Crakers. Outside the compound, chaos reigned. Jimmy realized that Crake was behind the pandemic. After that, Crake returned from outdoors the RejoovenEsence compound with Oryx, who was injured, and told Jimmy that they were immune to the virus and sold him that he was relying on him and killed Oryx. Jimmy directly shot him as a response.

The last period covers Jimmy's exodus from Paradise into the wildlife refuge with the Crakers, and it is in this period that Snowman starts narrating his story. This is why the reader finds Snowman alone with the Crakers at the beginning of the novel and from him he learns about the post-virus futuristic world with its remarkable scientific achievements. However, the novel ends with Snowman returning from his trip and coming across three humans who do not notice him. The narrative leaves a big question inside Snowman's mind about what to do with them; he wonders whether to kill them or to ally with them. Then, he takes his decision, which is not revealed to the readers, and says, "Time to go" (Atwood 192) as he moves towards them.



2.2 Imagination and depiction of Coronavirus in *Atwood's Oryx and Crake*

An ecocritical reading of the novel reveals Atwood's anthropocentric point of view where she imagines the end of the Anthropocene as a result of human anthropogenic activities, showing a linkage between environment, environment misuse, and the appearance of viruses. So how does Atwood foretell Covid-19 in her novel, Oryx and Crake?

Interpretations of Oryx and Crake show that Margaret has imagined and depicted a fictional virus similar to the Novel Coronavirus as a result of the anthropocentric relationship between human beings and nature; many epidemiological and clinical similarities do exist between both, offering the readers a narrative to raise their awareness about the possible results of climate change and environmental degradation, the possible results of their anthropogenic activities towards not only the environment they live in but also the whole planet in general. She has raised this issue predicting this result many years ago, even, before the appearance of the Novel Coronavirus; something human beings have experienced in reality, offering her readers in 2003 with a predictive narrative full of information about how to face and fight a deadly virus like Covid-19 that appeared in 2020. Though in the novel there is no direct evidence that climate change and environmental degradation have led to the appearance of the fictional deadly virus, the world Atwood depicts resembles a lot the current world human beings are living in, and this is a characteristic of most of climate change fiction, which is to deal with this environmental issue in an implicit way.

In the novel, characters live the same situation human beings live in reality with Covid-19, and this helps to raise points of comparison between both viruses. In the early stages of the pandemic Covid-19, countries all over the world adopted the control strategy and applied a series of basic procedures to stop the spread of the virus, including social enrollment, strengthening case isolation and close contacts, blocking epidemic areas, reducing personnel movements by traffic control, increasing social distancing, taking environmental measures, and forcing the shutdown millions of businesses. The main character, Jimmy, or Snowman referring to climate change and environmental degradation, is advised by his mother, who is a microbiologist, on how to protect himself from viruses, giving him instructions that are considered in the era of Covid-19 to be of primary interest of how to



defeat the virus. First, she defines what is meant by the disease and how it is caused as follows.

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.... (Atwood, 11)

What the mother says, here, is that not touching the nose and the mouth with unclean hands and always washing hands are the basic culture of how to be protected from viruses, and even non-scientific people know them. The problem lies on being strict to apply them or not. With the outbreak of Covid-19, these instructions have become the primary weapon against the virus to protect oneself. In the novel, Jimmy's mother describes also the way the virus functions in the human body. She says that,

A disease got into you and changed things inside you. It rearranged you, cell by cell, and that made 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 . . . "I could get a cough," said Jimmy. "I could get a cough, right now!" He made a coughing sound. (Atwood, 11-2)

In this passage, the mother simplifies a scientific discourse to her child because of its importance to be clarified and communicated. She wants to raise his awareness about the danger of a virus disease that can be avoided by following personal protection recommendations like washing hands and not touching the nose and the mouth with dirty hands. Accordingly, simplifying the scientific discourse is the strategy used by scientific authorities in the era of Covid-19 to raise awareness among people of how to protect themselves to avoid being infected. All these pieces of information stuck in the head of Jimmy, the one who is in charge of protecting the Crakers; they have helped him to take decisions of how to stop the spread of the virus towards the Crakers from the beginning of the pandemic crisis; he is aware that viruses can be transmitted through hands. However, the significant question is how does the fictional virus outbreak in the novel?



In the fictional world of Oryx and Crake, the virus outbreaks suddenly like the Novel Coronavirus, and things happen faster than anyone could imagine. Both viruses start in the same way and then spread fast and conquer the whole world. In the novel, it is portrayed that one evening, the news reports the emergence of a worldwide plague called JUVE, abbreviation of the Jetspeed Ultra Virus Extraordinary that kills thousands of people like Coronavirus that spreads very fast. At the beginning, Snowman, or Jimmy, thinks that "it was routine," just "another minor epidemic or splotch of bioterrorism, just another news item" (Atwood, 167). Then, he thinks that it is far away from him because it is just in Brazil.

The boys and girls with the HotBiosuits and the flamethrowers and the isolation tents and the crates of bleach and the lime pits would take care of it as usual. Anyway, it was in Brazil. Far enough away. But Crake's standing order was to report any outbreaks, of anything, anywhere, so Jimmy went to look. (Atwood, 167)

This is what happened to all people at the beginning of Covid-19 pandemic crisis; it was very far away, and no one thought that it would be in his own home country, and then, Coronavirus started spreading all over the world according to given strategies; outbreak in one country, spreading then from country to another and then attacked many at the same time to include then the whole world. As for the world of the novel, Jimmy recognizes that what is going on is something unique that humanity never witnessed before; it is an alarming and ongoing pandemic that hits one place after the other as if it is a 'rapid fire.' He says, "Then the next one hit, and the next, the next, the next, rapid-fire. Taiwan, Bangkok, Saudi Arabia, Bombay, Paris, Berlin. The pleeblands west of Chicago" (Atwood, 167).

After that Jimmy realizes that the virus's attacks have become simultaneously to include the whole world, "By midnight the hits were coming almost simultaneously. Dallas. Seattle. New New York. The thing didn't appear to be spreading from city to city: it was breaking out in a number of them simultaneously" (Atwood, 168). Both viruses share this characteristic, not to spread locally but globally. What are really amazing in the depiction of this fictional virus are the maps used to show the spread of the virus, "The maps on the monitor screens lit



up, spackled with red as if someone had flicked a loaded paintbrush at them. This was more than a few isolated plague spots. This was major" (Atwood, 167); this resembles a picture that has characterized the 2020's real screens for mapping the pandemic crisis.

Jimmy starts thinking that it is a global emergency, and this is highlighted through the panic situation of the three men who come to see Crake and blame him for the BlyssPluss Pills; they begin asking what to do in this difficult strange situation, what measurements they should take.

There were three staff in the room now: Rhino, Beluga, White Sedge. One was humming, one whistling; the third - White Sedge - was crying. This is the biggie. Two of them had already said that. "What's our fallback?" "What should we do?" (Atwood, 168)

However, in this situation, Jimmy advices them not to panic, referring to the importance of being psychologically balanced not to be contaminated. He replies:

"Nothing," said Jimmy, trying not to panic. "We're safe enough here. We can wait it out. There's enough supplies in the storeroom." He looked around at the three nervous faces. "We have to protect the Paradice models. We don't know the incubation period; we don't know who could be a carrier. We can't let anybody in." (Atwood, 168)

In this passage, there is the key of how the virus spreads; it is carried or transmitted from person to person, a fact that has characterized Coronavirus from the beginning of its outbreak. Therefore, the first measurement for Jimmy since "here was a lot of dismay out there" (Atwood, 169) is the lockdown, where he and the Crakers are not allowed to leave the area or let any other body enter. More than that, in this passage, social distancing is advised as a source of safety, and this is what has happened in reality with Covid-19; people have been locked down, prevented from visiting one another or even meeting one another. Therefore, JUVE has been demonstrated to be human to human transmission like Covid-19: "In the event of a bio attack, don't let anybody in" (Atwood, 169). In the novel, the lockdown seems to be effective in blocking the spread of JUVE inside RejoovenEsence



compound where Jimmy and the Crakers live, proving that the lockdown is crucial in stopping the spread of the virus.

With the appearance of Coronavirus, many questions have been put to investigate its origins; one of them has been that it could be a human-made virus. In the novel, the reader learns that the virus was spread through Crake's BlyssPluss Pills, the drug that was sold to the whole world by Oryx, "What fucking *everything*? It's a worldwide plague! It's the Red Death! What's this about it being in the BlyssPluss Pills?" (Atwood, 168).

Like what has happened in reality, in the depicted world, there are "not nearly enough ambulances" (Atwood, 169). Healthcare workers are tirelessly working to keep the communities safe; they are working on the front line, sacrificing their own health for others, denoting another type of war with new types of battles and another type of army against an unseen enemy. And, here, starts the role of political and security language to raise awareness towards the danger of breaking the lockdown in the spread of the virus: "The keep-calm politico speeches were already underway, the stay-in-your-house megaphone vehicles were prowling the streets." (Atwood, 169) Even religious rituals were not allowed to be practiced outside houses; Jimmy says, "Prayer had broken out" (Atwood, 169). This passage draws a vivid image of what have happened in reality with Covid-19, where political and security authorities have taken the responsibility for raising awareness in their speeches through a selected language.

Some of the symptoms of JUVE resemble those of Coronavirus too. High fever, bleeding from the eyes and skin, convulsions, then breakdown of the inner organs, followed by death. In the novel, Atwood narrates:

Jimmy tried phoning Crake on his cell, but he got no reply. He told the monitor crew to go to the news channels. It was a rogue hemorrhagic, said the commentators. 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, 167)

The other safety measurement the writer has been aware of to mention in the novel is the way of dressing, a model that has become very popular with the appearance of Coronavirus. The clothes they wear to protect themselves are as Atwood writes,

Daylight filters through the insulating glass bricks facing the skylight window well. He roams around the space he once inhabited, feeling like a disembodied sensor. Here is his closet, here are the clothes once his, tropical-weight shirts and shorts, ranged neatly on hangers and beginning to moulder. Footwear too, but he can no longer stand the thought of footwear. It would be like adding hooves, plus his infected foot might not fit. Underpants in stacks on the shelves. Why did he use to wear such garments? They appear to him now as some sort of weird bondage gear. (Atwood, 173)

Even wearing all this, still there is doubt to be contaminated, Jimmy says: "I'm toughing it out in a biosuit, but I don't really know whether I'm contaminated or not. Something's really gone off the rails" (Atwood, 174).

As for as the home routine during the Covid-19 quarantine, Jimmy in his fictional world lives the same routine like the routine people live with Covid-19, taking care of the Crakers, sleeping, sitting, doing nothing for long hours or watching events on TV or on the Net, such as the breaking of transportation, invasion of supermarkets, leaving churches and mosques. The narrator tells readers about Jimmy's routine during the lockdown. He writes,

The rest of the time he himself grazed, slept, sat for long hours doing nothing. For the first two weeks he followed world events on the Net, or else on the television news: the riots in the cities as transportation broke down and supermarkets were raided; the explosions as electrical systems failed, the fires no one came to extinguish. Crowds packed the churches,



mosques, synagogues, and temples to pray and repent, then poured out of them as the worshippers woke up to their increased risk of exposure. There was an exodus to small towns and rural areas, whose inhabitants fought off the refugees as long as they could, with banned firearms or clubs and pitchforks. (Atwood, 17.5)

The reader, here, learns life in lockdown or how routine has changed since the outbreak of the virus, JUVE, a similar routine people live with the lockdown of Covid-19; it has been as a dream, where all people all around the world have to stay at home almost all of the time. They are allowed out just once a day to exercise or go to the supermarket to buy essentials. In such necessary cases, they have to stay two meters away from other people.

Just as with Covid-19, a lot of programs on television talk about it; in the *Oryx and Crake*'s world, JUVE has occupied a vast area of discussion:

Pundits in suits appeared on the screen; medical experts, graphs showing infection rates, maps tracing the extent of the epidemic. They used dark pink for that, as for the British Empire once. Jimmy would have preferred some other colour. (Atwood, 175)

In the world of the novel, on television programs, they even raise questions about the vaccine:

There was no disguising the fear of the commentators. Who's next, Brad? When are they going to have a vaccine? Well, Simon, they're working round the clock from what I hear, but nobody's claiming to have a handle on this thing yet. It's a biggie, Brad. Simon, you said a mouthful, but we've licked some biggies before. Encouraging grin, thumbs-up sign, unfocused eyes, facial pallor. (Atwood, 175)

Like Coronavirus, two weeks is enough for the JUVE virus to change the human cells' system and the lifestyle system as a whole. In the novel, the second week has started the call for international emergency; patients are hospitalized in and medical staff have been



infected and started to die one after another. Thus, in this stage in the spread of the virus, they give it a name,

They'd given the virus a name, to make it seem more manageable. Its name was JUVE, Jetspeed Ultra Virus Extraordinary. Possibly they now knew something, such as what Crake had really been up to, hidden safely in the deepest core of the RejoovenEsense Compound. Sitting in judgment on the world, thought Jimmy; but why had that been his right? (Atwood, 176)

With the second week, the depicted global emergency in the novel has been reinforced by other measurements to stop the spread of JUVE, especially, after the difficult situation of hospitals, the closing of ports and airports. The narrator says,

In the second week, there was full mobilization. The hastily assembled epidemic managers called the shots – field clinics, isolation tents; whole towns, then whole cities quarantined. But these efforts soon broke down as the doctors and nurses caught the thing themselves, or panicked and fled. England closes ports and airports. All communication from India has ceased. (Atwood, 176)

The narrator adds to say, "Hospitals are off limits until further notice" (Atwood 176), in case of being ill, people are advised to stay home and drink a lot of water and call the hotline number, "If you feel ill, drink plenty of water and call the following hotline number" (Atwood, 176). All these scenarios' people live with the outbreak of Covid-19. However, in the world of the story all people die except for Jimmy and the Crakers:

Meanwhile, the end of a species was taking place before his very eyes. Kingdom, Phylum, Class, Order, Family, Genus, Species. How many legs does it have? Homo sapiens sapiens, joining the polar bear, the beluga whale, the onager, the burrowing owl, the long, long list. Oh, big points, Grandmaster. Sometimes he'd turn off the sound, whisper words to himself.



Succulent. Morphology. Purblind. Quarto. Frass. It had a calming effect. (Atwood, 177)

Thus, Jimmy, the only vaccinated person, starts a monologue how to be the only survivor; how to live without other human beings,

"I don't believe it, I don't believe it," he'd say. He'd begun talking to himself out loud, a bad sign. "It isn't happening." How could he exist in this clean, dry, monotonous, ordinary room, gobbling caramel soycorn and zucchini cheese puffs and addling his brain on spirituous liquors and brooding on the total fiasco that was his personal life, while the entire human race was kakking out? (Atwood, 177)

Through this passage, it clear how Jimmy's consciousness has been developed; he recognizes that the occurrence of the catastrophe just takes a short time to sign the end of the human race. At this stage, he becomes aware of what has happened. Though no one is going to be interested in his explanation-because he is the only survivor, he admits.

I don't have much time, but I will try to set down what I believe to be the explanation for the recent extraordinary events catastrophe. I have gone through the computer of the man known here as Crake. He left it turned on - deliberately, I believe - and I am able to report that the JUVE virus was made here in the Paradice dome by splicers hand-selected by Crake and subsequently eliminated, and was then encysted in the BlyssPluss product. There was a time-lapse factor built in to allow for wide distribution: the first batch of virus did not become active until all selected territories had been seeded, and the outbreak thus took the form of a series of rapidly overlapping waves. For the success of the plan, time was of the essence. Social disruption was maximized, and development of a vaccine effectively prevented. Crake himself had developed a vaccine concurrently with the virus, but he had destroyed it prior to his assisted suicide death. (Atwood, 179)



In this passage, Jimmy concludes that Crake, who represents science, is the only blamer for the pandemic catastrophe.

3. Oryx and Crake's motives

3.1 Jimmy's speculations

At the end of the pandemic catastrophe, the protagonist Jimmy writes,

Although various staff members of the BlyssPluss project contributed to JUVE on a piecework basis, it is my belief that none, with the exception of Crake, was cognizant of what that effect would be. As for Crake's motives, I can only speculate. Perhaps (Atwood, 179).

Here, what Jimmy speculates is the answer of how to solve the problem of climate change; he hints that the solution might not only be scientific; culture can play a role too, insinuating that literature can play an important role in raising people's awareness.

Through this story, Atwood shows how each individual should take the decision and start acting from his own to solve problems created by human beings, a call to change individual's behaviors for the common good of the planet. The human-made pandemic in the novel shows how human civilization is fragile and can collapse in front of an unseen enemy like JUVE even despite the global emergency portrayed in the novel, the ones human beings have experienced in reality with Covid-19, such as, lockdown, social distance, closing down airlines, businesses' shutting down, preventing public and private meetings, and supermarkets' scenes, etc.

In fast succession, except for Jimmy and the Crakers, almost all humans are infected and die because of the virus. The novel shows how humans have led the whole world to global ecological disasters, climate change and the appearance of deadly viruses because of their greed and the desire for material wealth. Their activities have caused not only the extinction of the nonhuman world but the extinction of human beings as well. Therefore, the blame, here, is not only put on Jimmy or Snowman, who feels the need to speculate what will come; Jimmy symbolizes all human beings, the responsible species for the Anthropocene, who have an incredible impact the whole planet with all its ecosystems, causing the suffering of all elements of the



nonhuman world. What has happened in *Oryx and Crake*'s post-apocalyptic world should be the big lesson for all humanity.

3.2 Oryx and Crake's message

Margaret Atwood's main message in this climate change novel, *Oryx* and *Crake*, is conveyed through the portrayal of two global crises, climate change and the deadly virus that kills humans by millions like Coronavirus. For her, the basis of human beings' health and their wellbeing is a healthy planet, and the loss of nature or the damage of its ecological ecosystems leads to the rise of viruses, showing human beings the consequences of their anthropogenic activities. If climate change is presented in the novel as "slow violence," (Schneider-Mayerson, 484), the virus JUVE claims to be a vast violence, a pandemic that has urged human beings to consider everything in their lives, starting from the nature of their relationships with all what surrounds them; human to human relationship and human to nature relationship.

Thus, Atwood gives readers lessons about what to do in a bio attack, the outcome that she has anticipated for the Anthropocene. She shows how telling stories can be effective to cope with a bio-disaster and raise people's awareness about solving the Anthropocene problems through reflecting their faults in an eco-narrative. When Jimmy at the end of the novel, decides to head out and lead the Crackers to nature, he stresses the fact that human beings can never live without nature, but nature does exist without them; human beings' existence is related to nature, but nature does not depend on them to live. Despite her dark portrayal of *Oryx and Crake*'s post-apocalyptic world, Atwood hints that there is still time to act urgently and change things, a hope for a new start.

She suggests that human beings can learn from their errors to improve the already failed relationship with the planet. To do so, according to her, human beings should reconsider their relationships with one another and then with nature, and this is portrayed in the novel at the very ending when Jimmy meets the three human beings. There, he is given optimistically the choice to decide, to kill them or have a new start with them but this time with suitable scientific alternatives to live safely because they will share the same fatal destiny if they do not work hand in hand to solve the issue of climate change.



Conclusion

At the time this article has been written, Coronavirus has lived with human beings for one year, moving from being a health problem towards becoming a social, economic, and political one. Human beings have passed many stages to adapt living with it too. In accordance with this experience lived with Coronavirus and based on ecocritical perspectives that seek to tackle the representation of the relationship between human beings and nature in literature, this article has investigated the foretelling of Covid-19 in Atwood's literary work, *Oryx and Crake*. The novel tackles the commonly accepted anthropocentric view of man about nature, a relationship that is based on human exploitation of nature that has led to the outbreak of *Oryx and Crake*'s virus, summarizing Atwood's vision about the current situation of the globe.

Through this ecocritical investigation, the novel shows the important role played by literature to reflect the ills of society in all its fields (scientific, religious, political), a role that could not be played by a scientific report, showing how stories can help to raise people's awareness about the danger of the Anthropocene. Simply said, Atwood's *Oryx and Crake* is a novel of big value; it shows how writers of literature are gifted to predict and foretell the outbreak of viruses that resemble real earthly ones, like Corona virus, and find meaning out of the crisis that urge them for positive change to protect both the human and nonhuman health.

Works Cited

- 1. Atwood Margaret, 2003. *Oryx and Crake*, Nan A., Talese, New York and London. Pdf.
- 2. Barry Peter, 2002. *Beginning Theory: An Introduction to Literary and Cultural Theory*, Peter Barry, ISBN. Pdf.
- 3. Bracke Astrid, 2018. *Ecocriticism and the Contemporary British Novel*, Radboud University Nijmegen, New York. Pdf.
- 4. Charles John Ryan, 2020. "Ecocriticism," *The Year's Work in Critical and Cultural Theory*, Pp.1-23. https://www.researchgate.net, Accessed Date 04/01/2021.
- 5. Glotfelty Cheryll, Harold Fromm, 1996. "Introduction: Literary Studies in an Age of Environmental Crisis," Glotfelty, Cheryll, *The Ecocriticism*



- Reader: Landmarks in Literary Ecology, University of Georgia Press, Athens and London. Pdf.
- 6. Schneider-Mayerson Matthew, 2018. "The Influence of Climate Fiction: An Empirical Survey of Readers," *Environmental Humanities*, Vol.10, No.2, (November), Pp. 473-500, https://www.researchgate.net/3415/, Accessed Date 15/02/2021.
- 7. Sykes, Rachel, et all, 2017. "Contemporary Studies Network Roundtable: Responding to Robert Macfarlane's 'Generation Anthropocene'," Pp. 2-47, *Open Library of Humanities*, https://core.ac.uk.pdf>, Accessed Date 16/02/2021.
- 8. World Health Organization, 2003. *Climate Change and Human Health: Risks and Responses*, Edi.A.J. McMichael, et al. WHO, Geneva, https://www.who.int, Accessed Date 15/02/2021.

