



## The Futuristic Warnings of the Scientific Progress in M. Atwood's *Oryx and Crake*

*M. Atwood'un Oryx ve Crake'indeki Bilimsel İlerlemenin Fütüristik Uyarıları*

### ABSTRACT

This article is an attempt to investigate futuristic warnings of scientific progress and its influence on human development particularly the ethical and social implications in Margaret Atwood's *Oryx and Crake* (2003). In the view of that, Margaret used the genre of speculative fiction to warn the impact of the technological and scientific advancement on the human civilization in terms of misusing or unchecking it. Besides, The author concerns about the social, ethical and environmental issues and their negative consequences as well. The study employs a textual analysis, as well as Close reading as a technique, is utilized to explore the thematic issues in the text. It also focuses on the notions of technological utopianism and modern sciences. It concludes the findings related to the critiques of scientific advancement and technology as the greatest addressed issues and a massive impact on life, ecology, and humanity.

**Keywords:** Atwood's *Oryx and Crake*, Dystopia's Warnings, Biogenetic Engineering, Environmental Deterioration, and Science Commercialization

### ÖZET

Bu makale, bilimsel ilerlemenin ve insan gelişimi üzerindeki etkisinin, özellikle Margaret Atwood'un *Oryx ve Crake* (2003) adlı eserindeki etik ve sosyal çıkarımların fütüristik uyarılarını araştırma girişimidir. Bu görüşe göre, Margaret spekülasyon kurgu türünü, teknolojik ve bilimsel ilerlemenin insan medeniyeti üzerindeki etkisini, onu kötüye kullanma veya kontrolden çıkarma anlamında uyararak için kullandı. Ayrıca, yazar sosyal, etik ve çevresel sorunlar ve bunların olumsuz sonuçlarıyla da ilgilenmektedir. Çalışma, metinsel bir analiz kullanır ve metindeki tematik sorunları keşfetmek için bir teknik olarak Yakın Okuma kullanılır. Ayrıca teknolojik ütopyacılık ve modern bilim kavramlarına odaklanır. Bilimsel ilerleme ve teknolojinin en çok ele alınan sorunlar ve yaşam, ekoloji ve insanlık üzerinde büyük bir etkisi olduğu eleştirileriyle ilgili bulguları sonuçlandırır.

**Anahtar kelimeler:** Atwood'un *Oryx ve Crake*'i, Distopya'nın Uyarıları, Biyogenetik Mühendislik, Çevresel Bozulma ve Bilim Ticarileştirmesi

### INTRODUCTION

Generally, Margaret Atwood's *Oryx and Crake* is significantly considered the most recognized narrative fiction published in (2003) as one of the first book in the MaddAddam Trilogy, followed by *The Year of the Flood* (2009) and *MaddAddam* (2013). Concerning the author, the university professor, Margaret Eleanor Atwood, is a Canadian novelist, environmental activist, literary critic, poet, and essayist. Her works mainly explore the issues of identity, gender, religion, global warming, myth, and power politics (More, 2023, p. 1). As Atwood's narrative is recently defined, "Atwood insists that her *Oryx and Crake* is a Speculative fiction, not a science one" (Kaup, 2021, p. 62). Thus, the speculative fiction is stated as a genre of fiction that encompasses works in which the setting is other than the real world, involving supernatural, futuristic, or other imagined elements. The novel introduces a Snowman as a survivor of an apocalyptic event who remained physically weak and tried harder to survive Throughout the reflective memories of the main character, the reader is introduced the previous advancement of life and the apocalyptic event happened to the humanity. Atwood's *Oryx and Crake* is an imaginative world which is quite different from the reader's reality, as a dystopian, it presents the narrative hybridity that portrayed the character from the ignorance into the resistance to survive (Sá, 2014, P. 72). As a characteristic form of the apocalyptic literature, it involves distinct consideration and effort to comprehend its message so accurately (Taylor, 2016, p. 23). The novel, by all its features of apocalyptic and post-apocalyptic fiction, could shape the reader's understanding and involve them into the futuristic issues regarding the scientific advancement and its huge impact on the humankind and the progress of civilization of the world.

This study aims to analyze the novel, as a speculative fiction, to explore the negative impact of the scientific advancement which shows the influence over the human kind in the future. It argues that how the author in this

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novel predicts the futuristic warnings throughout the themes that are encountered in the analysis, besides, how these warnings shape the future in the realm of the scientific advancement in the human's life. The study reaches out to the findings that the cautious points are found in the prospective of biogenetic engineering, ethical considerations, ecological issues, and commercialization of science. It also concludes the destructive power in collapsing the human civilization throughout the themes in the future of the human beings.

## LITERATURE REVIEW

Generally, many articles and studies have recently been conducted about the issue of scientific advancement in the fictional or even non-fictional texts. In the fictional narratives, many authors have contributed their works on the role and the scientific progress and further advancement in the literary works that have primarily encountered the questions of humanity in the view of that progress. Therefore, Margaret Atwood's *Oryx and Crake* (2003) is considered speculative fiction that delves into the unchecked advancement of science and ends with a catastrophic event and ending the human civilization. Accordingly, there are certain studies have been tackled on the issue of science fiction, technology, and its impact of the humanity. Atwood's novel is reviewed as a speculative fiction and examined many issues by several researchers.

Concerning Sa (2016), in the article entitled "Retelling Apocalypse in Margaret Atwood's *Oryx and Crake* and The Year of the Flood", the researcher deals with the apocalyptic theme and the dystopian issues happened in the narrative. The article also tackled Atwood's scenario of dystopia that a technology-driven society which devaluates the form of critical thinking as well as the art that make the creation of virus possible which collapses the humanity and the world of civilization. Meanwhile, Ku Chung (2006), in the article entitled "Of Monster and Man: Transgenics and Transgression in Margaret Atwood's *Oryx and Crake*", attempted to examine the events and review the boundaries between the monster and human in Atwood's *Oryx and Crake*. The researcher focuses on the issue of individuality of the human form in the realm of the anthropocentric hierarchy in a way that shows how the Crakers resemble the humans in an adaptive form to the post-apocalyptic era. He focused on the ethical transgression of the main Character, Crake, throughout the procedure of his scientific manipulation. The article also pointed out the monstrous features of Crake as a Mad-scientist whose destruction of the human race essentially manifests the monstrous one that shows the science when it conspires with capitalism. More (2023), in the article entitled "The Scientific and Adventurous Elements in Margaret Atwood's *Oryx and Crake*", discussed the issue of scientific elements as well as the adventurous ones in Margaret Atwood's *Oryx and Crake* in which the elements rise the concern of the reader to delve deeply into the narrative text. In addition, the key objective of the article is an emphasis on the modern technology that whatever advancement or any logical discovery made by human beings, this moves the humans much closer to the technology along with the materialism and away from the natural world. It argues the impact of science in the novel and how it shapes the human prospective which enables humans to curiously work on the inventions and obtain the benefits to survive.

Regarding the notion of the utopia of technology, Kabak (2021), in the article entitled "Margaret Atwood's *Oryx and Crake* as a Critique of Technological Utopianism", argued the elements of utopian-dystopian narrative in the Atwood's narrative to criticize the notion of utopianism of technology which opposes the human-centered and religious origins, and the technological utopian project of the scientist character, Crake. The article aims to clarify that the Canadian novelist Atwood, in her *Oryx and Crake*, used of nostalgia as a tool of criticism and as a framework to oppose the notion of the technological utopianism. It also focused on an analysis of the novel to tackle the dangerous path of the human intervention to the ecology and its devastating impact on the humans and civilization. The researcher also referred to certain clarifications to the social, environmental, and economic problems which can easily be developed into nightmarish future possibilities in the narrative. The article concluded that, in Atwood's fiction, the nostalgia to a perfect existence and utopian solution to the environment that provides the utopian life away from the destructive power is unable to be achieved by Crake in which it lastly caused the devastation of the human civilization and progress.

Apparently, most of the previous studies focused on several issues and themes in Margaret Atwood's *Oryx and Crake* to delve into the various concerns and multi-interpretations in which the fiction could provide. Throughout the explanation of each study and articles that encountered the most crucial thematic subjects that are discussed by the researchers including the elements of science and adventures, the critical analysis of the technological utopianism, modern sciences, exploitation and dystopian, and the narrative styles a long with the transgression in the narrative. Accordingly, this study gap is found that is the cautions and warnings on the future of the scientific progress and its impact in Margaret Atwood's *Oryx and Crake*. Therefore, it will mainly focus on the Genetic Engineering, Environmental Degradation, Corporate Control, and Commercialization of the Science in the novel.

## BIOGENETIC ENGINEERING

In the dystopian novel, *Oryx and Crake* by Margaret Atwood, there are themes like genetic engineering and bioengineering are discovered to show the social, ethical and environmental impact of technological advances. Atwood gives a universal image of how manipulating humankind can be through playing with DNA that leads to disasters and utopian world (Bhalla, P. 766). Throughout her novel, Atwood highlights the potentials of what danger bioengineering can have through showing the unchecked research of technological development consequences.

It is clarified from an instance of Atwood's depiction of genetic engineering can be seen in the genetically reformed species that are made by Crake, the character that created the crakers. Concerning humankind side effects and replace by no harming and peaceful community, Craker creates these crakers. This insight shows the central case of genetic engineering and the outcomes of a utopian world (Silpa, P. 429). Crake's justification of eliminating humankind is the suffering and war that, in his point of view, mainly happen because of human relationships and emotions.

From the novel, the moral challenges and the impacts of unchecked research is also explored. In spite of appearing to be perfect, the Crakers have no exact human traits like being unique and having special feelings. Thus, it is driven from the reason of losing humane and moral concern as its depicted from the novel when some parts of humans are removed as it's shown by the novel that they're dehumanized. This also shows these creators lack all human emotions and intimate feelings (Martin, P. 179). Atwood shows that the aim beyond the perfection of such genetic engineering could lead to the damage of the essential human traits, and creating new individuals that are engineered.

Moreover, *Oryx and Crake's* bioengineering impact on the whole society and environment is a big mass. All that matters in the novel is a future that leads to using technology for profit interests. Snowman, a later version of Jimmy, considers on this self-indulgent business, "The Corpsmen were in the habit of setting up schemes of that sort, to capture subversives in the making. Weeding the pea patch, ... the Compounds were said to be mined with such potentially lethal tunnels" (Atwood, P. 169). This analysis ensures that the possible danger dealt with leading business associations let scientific advancement develop without proper rules or moral consideration. The danger that is seen in the story is not different from any other disastrous images that make people scared and lose themselves and their identity as human beings, because of such horrible impacts of unchecked genetic engineering that leads to apocalyptic world. (Agir, P. 115). Due to the serious caution the novel hints at Atwood shows how an environment driven by commercialization can be harmful.

Devaluing the ecosystem through biotechnology is another significant element that this story is emphasizing. A world destroyed by climate change, genetic contamination as well as the pollution in general is what Atwood is portraying. As the novel is explored, the making of genetically adapted organisms are caused by unsupervised biological trouble, and that led to creating diseases and destroying biology's system. This is observed from Snowman's narrative as he "expresses regret for the status of the world" (Atwood, P. 277). Here Atwood attempts warning humankind of dealing with unchecked genetically modifying environment with caution.

Another fundamental concern going through Atwood's novel is 'playing God'. The aim that Crake has for reforming the nature and humankind shows how perfect desires to have a control over the world like a god. Eventually this desire leads to a chaos and disaster. Most of the population is eliminated and murdered by the disease Crake made after applying terrible genetically modified creatures without checking consequences. Seeing Crake's actions makes Snowman comment by saying: "There'd been a lot of fooling around in those days: create-an-animal was so much fun, ... it made you feel like God." (Atwood, P. 364). And this shows how immoral and cruel it is when it is dealt with interfering another being's nature.

*Oryx and Crake* cleverly explores the complex and hidden side effects of bioengineering. The risks of ethic and scientific advancement are examined when it's dealt with greed, hatred, profit interest and inhumanly in general. This work warns the risk of unchecked scientific interests and the moral significance when dealing with technology and its progress in the future. The novel highlights the importance of taking responsibility and strong consideration when working on genetic engineering and being fully careful of its effects on humans and the natural environment.

Atwood, through the *Oryx and Crake*, warns against such arrogant, unchecked, uncontrolled scientific advancements through genetically modified organisms that are produced unethically and without complete consideration of the nature and environment. This leads to destroying the ecosystem eliminating species and damaging the climate. This is all a result associating with the science and not taking consideration with ethics and the nature of environment.

## DETERIORATION OF THE ENVIRONMENT

Through this novel, Atwood offers a warning about a near dystopian world where the environment is degraded behind the unchecked scientific advancements and corporations' interest. *Oryx and Crake* highlights the human impact on the environment when the personal interest is above ecosystem. These are the futuristic warnings to the consciousness of the reader to consider and avoid the destructions that might happen in such circumstances. (Bhalla, p. 766). It is done through genetic engineering and manipulating the nature.

In the degradation in environment aspect, it refers to the natural territories. The 'pleebland' where industry is active, that is changed to damaged land, represents this theme. The gloomy sense that has caused the environment to lose its nature is illustrated in the novel through the huge air pollution from industrial corporations, as they're described "the sky was grey, the wind was chilly" (Atwood, P. 14). The world in *Oryx and Crake* is depicted in a way that the pollution is spread over many areas all over the world.

What leads Atwood to criticize the biotechnology and genetic engineering is its consequences on environment and its nature. The genetically engineered 'pigoons' and 'rakuns' represent the purpose financial profit, because in the beginning, the justification is to create them for particular human requirements, later they're used for industrial interests, which is immoral and unethical manner. Another manner that is notably examined in the novel is the arrogant attempts by Crake at the RejoovenEsense facility. Here, Atwood depicts such indications to highlight the possible risky and disastrous results that can come to be real. This is done through interfering with the nature and from the bioengineered animals. All this comes after human's manipulation and attempting to change nature.

Another major reason behind the environmental degradation, as depicted in the novel, is human's unawareness and using science for personal interest. Crake invented the BlyssPlus Pill that resulted in the catastrophe. Crake "himself developed a vaccine concurrently with the virus." (Atwood, P. 266). Crake indeed was aware of how bad the pill's virus was, and still insisted to invent it and lead it to the disastrous and fatal results in humanity and to the environment. Moreover, due to devastating danger of the pill and having a big team with Crake at work, no one was "cognizant of what the effect would be" (Atwood, P. 266). This point shows how Crake uses his position and power to receive such outcomes.

To show human's exploitation and profit making over natural sources and genetic supplies, Atwood emphasizes on such a significant concern of commercializing the nature. Throughout *Oryx and Crake*, this manipulating and dominating corporations are depicted as such. The genetically modified chickens 'ChickieNobs' were created for the purpose of more profitability. Living creature depicted and considered as tools and supplies, as Atwood describes them as "as just a large lump of chicken flesh that could be manipulated to grow any desired way" (Atwood, P. 291). The depiction of the mentality of capitalism that prioritizes financial interests over ethics and the nature of ecology, in the novel, it is considered devaluing humanity and can be a huge and devastating dystopian world that follows environmental destruction.

By drawing attention to the possible impacts of environmental irrelevance, Atwood's *Oryx and Crake* illustrates how climate change affects the environment and humans. Growing sea level, weather change and population displacement are all elements that need to be considered and be cautious before they pave the way to an uncontrolled destination caused by humans themselves.

Through examining the human behavior with the environment, it can be the relationship of human behavior with environment, it can be declared that the social and moral weakening are resulted in human's manipulation of environment. Crake's ideas of using technology to eliminate human characteristics and breaking limits indicates his isolation from the natural environment and seeking to create a man-made situation, and that led to creating the Crakers. Also, in order to have a safe environment, *Oryx and Crake* reminds the reader of keeping the morals and taking responsibility when dealing with technology. (Bhalla, P. 766). The destructive goal of Crake comes to a devastating failure after attempting to create a genetically modified 'paradise', which can be seen as a caution of taking consideration on not manipulating the nature.

Atwood's novel gives a horrible illustration of declining environment due to not considering environmental impacts. She shows the importance of nature and the ethics. The genetically engineered world that the author is trying to portray is a strong message on being cautious regarding possible outcomes that can occur when dealing with technology without taking into consideration and responsibility. Atwood leaves the reader thinking about how human being can reevaluate their bond to environment, not to act arrogantly on against the nature and ecology, because everything is interconnected with balance.

Throughout the actions and behavior of Crake, it can be noted that Atwood is attempting to demonstrate the outcomes of not appreciating the insight of nature and not manipulating it for the sake of profit gaining and

controlling it, or for any personal purposes. Crake has issues in perceiving that nature is not something to play with, and the fact that everything is good by its own being. (Widad, P. 76). *Oryx and Crake* represents a future where irresponsibility and not being cautious when seeking for knowledge and industry, will lead to huge collapse. The novel shows how ethical blindness in dealing with unchecked, uncontrolled and unsupervised scientific research causes disastrous effects.

### ETHICAL CONSEQUENCES ON THE SCIENTIFIC RESEARCH

Atwood's *Oryx and Crake*, as a dystopian novel, displays the probable consequences that can result from scientific desires through manipulating natural life and not considering ethical consequences when dealing with scientific experiments. The story serves as foretelling, devastating, and emphasizing on issue with human consciousness towards the future of the world. (Agir, P. 111). The novel gives a warning about boundaries linked with scientific advancement, genetic engineering, domination of corporations and human control.

Therefore, it is significant to be cautious about the future when it comes to ethics and scientific progress. In the novel, Crakes' invention of crakers is aimed at creating a human environment free from problems and conflicts. He wants to eliminate the whole human generation and their traits in order to get to this goal (Atwood, P. 133). At this point, the ethical problem arises. Crake doesn't care about moral concerns or even ecosystem results. In order to get rid of conflicts like wars, emotional sufferings and misbehaviors, Crake attempts to jump over natural communication skills to deal with such concerns and goes for destruction. "he (Crake) can cut across the Compound space on level ground – and make his way out by a side gate" (Atwood, P. 214). Though he aims at resolving human imperfections, his actions show immorality and leading human race to loss of essential traits and uniqueness.

The commercialization of science is another significant concern that Atwood criticizes. The novel depicts a world where moral principles, ethical manners and cautious ability to make decisions is all ignored for the sake of reaching a goal with scientific experiments and industrial profit (Silpa, P. 429). This is considered as exploitation and manipulation of natural environment. As the novel shows, pigs are refined to make organs transplantation for humans. They're even implanted with some of human characteristics. They are "much bigger and fatter than ordinary pigs" (Atwood, P. 19). For the sake of commercialization and industry benefits and its advantages, moral implications are totally ignored and not considered.

This significant concern elaborated in *Oryx and Crake* is the destruction of jungles and polluting river by several companies for the purpose of making money which prioritized over ethical concerns. "Naturally they develop the antidotes at the same time as they're customizing the bugs, but they hold those in reserve, they practice the economics of scarcity, so they're guaranteed high profits" (Atwood, P. 164). Corporations even purposely make diseases and later, they provide solutions, and of course people are obliged to buy from them. Therefore, this is another immoral way of doing industry and business. Throughout the portrayal of the two characters, Jimmy and Crake, it seems that Jimmy has lived a cruel and hard childhood, and Crake as well has issues dealing with humans; he is found to be lacking or suppressing many humane acts and traits as a result of the environment he was living in. These negative perceptions are the reason of the destruction of humanity and breaking down the ecosystem (Silpa, P. 430). In this point, the extent of manipulation and exploitation on individuals and communities is clearly illustrated.

Another significant symbol in the novel is the representation of the scientific over control. Overconfidence and having desire to control everything is depicted in the character of Crake, but through ways of manipulating, deceiving and exploiting. This is examined in *Oryx and Crake*, as Crake deals with achieving his goals without regarding the consequences. Through the scientific advancement, Crake believes that he can control the natural environment and human performance. Atwood's description of Jimmy's remarks on Crake's ideology is that Crake was to refine the world into a more improved one. That of course wouldn't be any better since it is only from one person's point of view and not taking others' interests and understanding. As Jimmy's remark on this concern clarifies that "Conspiracy theories proliferated: it was a religious thing, it was God's Gardeners, it was a plot to gain world control. Boil-water and don't-travel advisories were issued in the first week, handshaking was discouraged." (Atwood, P. 261). Here the idea of not taking the consideration occurs when dealing with scientific advancement without regarding ethical manners concerning what will happen in the future of beings and of nature.

Ethical commitment is well depicted in the novel when facing near disastrous consequences. Humankind almost vanishes because of Crakes actions. This emphasizes the outcome of scientific research when it's not ethically regarded. Crake's ParaDice Project is a perfect example to show how horrifically he was thinking towards economy and even represents the reappearance of Second World War (Frew, P. 13). Not taking responsibility, not having supervision and keeping the order in system in general and in ecosystem in particular in scientific

discoveries is what Atwood highlights, which leads to such a disastrous dystopian environment where scientists like Crake can recklessly do whatever they desire without moral implications.

The representation of scientific research is clearly examined in *Oryx and Crake*. Ethical implications are strongly emphasized to be reminded for consideration. Having a guide, system and ethical principles when dealing with corporation ambitions, bioengineering, scientific progress is what Atwood cautiously informs the reader to think again. The novel indicates that technology and ethical considerations should be dealt with natural balance between biotechnology, industry, ethics and the environment.

### SCIENCE COMMERCIALIZATION

*Oryx and Crake* is a horrific novel that depicts a dystopian life where the interests of corporations take advantage of technology and science, which results in severe social and ethical complications. The author critiques to present a society which scientific progress cares more about business interests than humane conduct. This is highlighted when, in the novel, humans take advantage of genetically modified creature in an arbitrary way (Agir, P. 115). Atwood illustrates the threats of corporations' domination and trading by science.

Emphasizing on the companies that almost take control on the communities, in *Oryx and Crake*, is how science is commercialized. Atwood's portrayal of OrganInc, HelthWyzer and Farms is to show how profit interests are more important than ethics and humanity. Animals that are genetically modified are refined in such places and raised to make human organs transplantation from such animals. As it is illustrated in the text,

“The goal of the pigoon project was to grow an assortment of foolproof human tissue organs in a transgenic knockout pig host – organs that would transplant smoothly and avoid rejection, but would also be able to fend off attacks by opportunistic microbes and viruses, of which there were more strains every year” (Atwood, P. 16).

The novel presents the manipulation that science is facing for the goal of profit gaining. Another complication that is examined in the novel is the exploiting science for the purpose of trading. HelthWyzer's goal is to make products that are used for medical use. They apply some unethical techniques for the purpose of doing business. They create viruses and spread it over communities and then making profits from its treatments that they themselves product. In order to make a progressive commercialization for this industry, Crake uses manipulation to succeed in his plan. His remark proves this point when he says that “[n]ow, suppose you're an outfit called HelthWyzer. Suppose you make your money out of drugs and procedures that cure sick people, or else – better – that make it impossible for them to get sick in the first place.” (Atwood, P. 163). Science is being taken advantage of when medical products are traded after they create health issue from by the use of technology. The novel also highlights on the scientists that disgracefully run experiments by exploiting ecosystem. (Widad, P. 74). This clarifies how much science has lost its value for the purpose of commercialization.

Moreover, the extent of severe outcome of controlled scientific research and inventions by corporations is what Atwood highlights. In *Oryx and Crake*, scientists do not have much freedom of acting; they are, like objects, controlled and used by industrial manufactures. Once ecosystem is not supervised with ethical and clear environmental standards, it will lead to chaos and irrevocable destructions to humanity and environment. (Agir, P. 117). Atwood cautions the reader to highlight the subject of consciousness through representing such serious threats to nature and science, once science is not treated with an organized system.

When Crake opens the BlyssPluss project at RejoovenEsense, he plans to control the population. In the surface, the pill is produced and introduced to society and to the market as medical supplement for sexual improvement needs. “The best diseases, from a business point of view...would be those that cause lingering illnesses” ironically remarks Crake (Atwood, P. 165). This point perfectly illustrates how dominated scientific experiments and progress is by corporations and manufactures. This kind of business is after making profit more than finding cures for diseases.

Ethical complications have serious outcomes when controlling corporations take immoral advantage of science and nature. As Crake remarks that “all it takes...is the elimination of one generation” to create a flawless society” (Atwood, P. 172). This ideology shows how the people who take control over science with power and without ethical manners and supervision will lead humanity and humankind to massive destruction, when bioengineering and science is at the wrong use (Bhalla, P. 766). The novel depicts how Crake plays with lives of creature, when he creates Crakers as he thinks they will not have any human imperfections nor conflict.

Atwood highlights the domination of corporations over the life system of the society. In a very organized way, the companies like HelthWyzer and RijoovenEsense run industry and make money through biologically innovative product, which has the possibility of developing and improving lifespan. (Balaje, P. 643). Science has lost its value

and control by the corporation's profit-making goals. Happiness, well-being and sexual enhancement are just for sale without taking any moral considerations. Humans are devalued and considered as just industrial objectives, which can be considered as devilish acts. (Silpa, P. 429). This shows how the novel depicts the irony and immorality, for the fact that everything being done is for the goal of doing business and commercialization.

Accordingly, it is considered to highlight the major warning of risks and threats that are behind uncontrolled and unregulated scientific advancement and its experiments is what Atwood's *Oryx and Crake* aims at delivering. Through the portrayal of bioengineering companies that take control and advantage of scientific advancement, the author criticizes the commercialization and monetization that is done by people using science and natural environment. The novel serves as a reminder to take more consideration concerning the possibilities of the sever and dangerous outcomes when moral and ethical manners are ignored, and scientific advancement and ecosystem is not responsively monitored.

## CONCLUSION

In conclusion, the text is significantly examined to come up with the concept that the author's prospective in highlighting the role of scientific advancement played a massive role to manipulate the notion of fragmented life which the futurist vision consequently reflected to the humanity and the world. Atwood brought the idea of genetic engineering based on the scientific abuse and genetic modification that are really common phenomenon. It has been found that humans are exploited by the power of technology and scientific progress which brings the catastrophic events to the humanity.

Concerning the role of scientific elements and the narration of the apocalypse, the novel is regarded as the collection of scientific notions, futuristic experimentations, and various expectations that will happen to the humanity and western civilization. On the contrary, the study also shows that the humans' attitudes and reaction towards the scientific technology is a matter of ethical transgression that humans' inability to overwhelm the desires that caused an unexpected devastating event happened. As a result, it can be claimed that *Oryx and Crake* has attempted to give an extra attention that the humanity should consciously be aware in retelling the apocalypse encompassed the scientific adventures in to vague end.

Atwood's *Oryx and Crake* investigates a dystopian world where advancements of technology are controlled by industrial profit gaining. It shows no interests for prioritizing morals and society and nature, and that leads to devastating outcomes. The novel digs into some serious concerns to be examined like degrading the environment, bioengineering and genetic engineering, control of corporations and monetization of scientific progress, and ethical consequences that come after scientific experiments. The novel attempts to caution again the probable threats behind unsupervised scientific and biological progress that are run by industrial interest. The remarkable point of this novel is the fact that it serves as a warning against what is happening in nowadays lifespan and even greater reminder for what may happen in the future.

Ultimately, the novel illustrates an image for the world where industry take over all that is from science, in which human considerations do not matter as long as profit is gained. the futuristic expectations and predicted visionaries are determined by the study to intellectualize certain notions of scientific advancement in the future of humanity. The study has examined Atwood's *Oryx and Crake* in the way that the text is a set of clarifications, thoughtful warnings, ways to be cautious and attentive examinations to the future of technology and its impact on the humanity and civilization. Thus, several researchers have debated the reasons and factors behind finding the risk of the scientific progress in the novel due to the unawareness of humans and being cautious towards the progress of scientific technology, while the other have found their articles as critiques to examine the technological utopian and modern science in the exploitation of the materialism.

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