

How to Cite:

Rajeshwari, S., & Meenakshi, S. (2022). Merging facts with fiction: replication of COVID-19 and cross-species transplantation in Margaret Atwood's dystopian fiction oryx and crake. *International Journal of Health Sciences*, 6(S3), 11932–11938.
<https://doi.org/10.53730/ijhs.v6nS3.9199>

Merging facts with fiction: replication of COVID-19 and cross-species transplantation in Margaret Atwood's dystopian fiction oryx and crake

Rajeshwari S.

Research Scholar, Department of English, School of Social Sciences and Languages, Vellore Institute of Technology, Vellore- 632014, India
Email: researchphdvit@gmail.com

S. Meenakshi

Assistant Professor Sr., Department of English, School of Social Sciences and Languages, Vellore Institute of Technology, Vellore- 632014, India
*Corresponding author email: meenakshi.s@vit.ac.in

Abstract---This research paper elucidates cross-species transplantation and its impacts on both fact and fiction. This study focuses on the bond between science and literature. In relation to this claim, researchers look into how modern scientific technology influenced Margaret Atwood's *Oryx and Crake*. The first novel in the MaddAddam Trilogy is *Oryx and Crake*. The novel is set on the North American East Coast. Through her novels, Atwood reflects the real-world elements in her fictive world and also warns the present generation about their future. It is present in its adventurous form, which depicts the downfall of the human race. Researchers have utilised the exploratory research method for this study. This article discusses the emergence of both fictional and factual creatures through the method of xenotransplantation, such as Pigoons, Rankunk, Wolvogs, Crakers, Bobkittens, and luminescent rabbits, and it also expresses the similarity between the Covid 19 virus and the JUVÉ virus. (Glover, 2009) The article "Human/Nature: Ecological philosophy in Margaret Atwood's *Oryx and Crake*," written by Jayne Glover, states that, according to the researcher, the actions of Crake and his significant innovations contributed to the collapse of civilization in the world. "One time does it all." The birth control pill leads to high fever and bleeding from the breakdown of the inner organs, followed by death. (Glover, 2009). This research article shows how Atwood uses the fictional creatures in *Oryx and Crake* to show

how the rise of technology and the fall of the human race are at odds with each other.

Keywords---cross-species transplantation, science, literature, COVID-19, Pigeons, crackers.

Introduction

Literature is not only a mirror: it is also a map, a geography of the mind. Margaret Atwood: *Oryx and Crake* describes the end of the current human generation after the huge catastrophe and the beginning of the next post-apocalyptic period of crackers, human-like creatures. The protagonist of the novel is Jimmy, commonly known as a snowman. He thinks that he is the only survivor of the huge disaster. He is the caretaker of the Crackers in the post-apocalyptic period. He took the role of the bridge that connects the past and present. Crake, the antagonist, handles two major projects in his paradise, a private lab. The first project was the production of Bliss Pluss Pills, which were circulated as birth control pills. Later, Jimmy came to know the truth through Oryx, that Crake hid the JUVE killer virus inside the pills, and it spread all over the world. The virus started to spread and people slowly started to die. Atwood named it the "Red Death." "The JUVE killer virus has broken out in Fiji, spared until now." CorpSeCorps chief declares New York a disaster area. major arteries sealed off " (Atwood, 2004).

The same kind of killer virus named COVID-19 (Coronavirus disease) has started to spread all over the world. COVID has killed more than a million people. Also, now other new variants have entered the field and it has started to spread among the people. "The World Health Organization has warned that half of Europe will have caught the Omicron Covid variant within the next six to eight weeks." ("Covid," 2022). The second project is creating a human-like species, and he named it Crackers. Atwood's *Oryx and Crake* majorly focused on the transgenic elements. The scientists in this fiction state that creating new creatures by blending various genes provides so much fun and it makes them feel like gods. "Create-an-animal was so much fun, said the guys doing it; it made you feel like God."(Atwood, 2004). So they invented various hybrid species. This study ends with information about various aspects of hybrid species such as pigeons, Crackers, Wolvogs, Rankunks, Bobkittens, and Luminescent rabbits.

Literature Review

(Akhter, 2021) The researcher has done a study titled "COVID-19 Pandemic and Apocalyptic Literature: An Analysis of Margaret Atwood's *Oryx and Crake* at the Time of the Coronavirus." This article justifies the idea of literature as a reflection of life. This article discusses how the apocalyptic literature merged with the modern scenario of COVID 19. The author describes Atwood's *Oryx and Crake* from the perspective of Covid-19. Here the researcher compared the COVID virus with the JUVE Virus, which was discovered by the antagonist Crake. It has the full responsibility for the extinction of the human race from the earth. The researcher lists out various literature in the essence of a pandemic. (Pinkham et al., n.d.) The research article enlightens the ideas of xenotransplantation through

Atwood's *Oryx and Crake*. Lucy Nield begins with information that was popular in the late twentieth century. The author provides a description of Vacanti's mouse, which bears a human ear on its back. The author made a comparison between Atwood's fiction and her idea of xenotransplantation. She also talks about how far humans have come in biomedical engineering technology and how Atwood's fictional creatures, like pigoons, are used to grow human organs.

According to Louisa Berry's research, "Writing and Reading inside and beyond an apocalyptic paradigm: *Oryx and Crake* the Read and The End," The traditional view of the apocalypse is described in this study report. According to the study, apocalyptic depicts the entire destruction and end of the world. The history of the apocalypse is discussed in this study. The word apocalypse comes from the Greek word "apokalupsis," which means "uncovering" or "destiny of the world." (Horizonte, 2014) This article is based on Belo Horizonte's "Storytelling as Survival in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*," which discusses the condition of an apocalyptic survivor. The researcher explores the dystopia theory. "In overtly narcissistic texts, the emphasis is upon bringing both this liberty and this duty of reading and will respond accordingly." (Horizonte, 2014). Margaret Atwood has written many different types of fiction, such as gothic romance, spy thrillers, science fiction, and historical fiction. The protagonist of *Oryx and Crake* is lost in the world of oblivion. This novel has two narrative forms: one that takes place before and after the world's destruction, and the other that takes place afterward.

(Roddis, 2013) Someone Else's Utopian: The Eco-Posthuman' Utopia of Margaret Atwood's *Oryx and Crake*, " by Melissa Roddis. In this paper, the researcher provides an alternative Utopian vision and introduces eco-posthuman themes, where Crake attempts to create a society without humans without corruption, according to Crake. According to Crake, without human beings, the world retains its purity. Crake envisioned a Utopian world for the post-apocalyptic world of crakers. This article elaborates on the researcher's eco-posthumanism viewpoint. According to the researcher, Crakers, the creatures created by Crake, are considered monsters because they are made up of scientific hubris. They have devised a plan to obliterate the human race from the face of the earth. (Bergthaller, 2010) "Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*," written by Hennes Bergthaller. This article examines environmental ethics as it relates to protecting the environment from tainted brains. Every individual has a personal obligation to protect the environment. As a result, they should understand the value of nature and work to preserve it. This paper talks about how important environmental studies are, including how human mistakes cause ecological crises.

Research Methodology

In this study, researchers used the exploratory research method to enhance their ideas. It helps to derive new knowledge, which provides an approach to solving the problem. The explorative method deals with unfamiliar ideas and helps to find all the native ways to solve a problem. Through this method, researchers isolate their key variables. There are two sorts of exploratory research methods. The first

type of research is primary research, and the second type of research is secondary research. In primary research, the pieces of information are directly gathered from the subject, such as direct interviews, observation, focus groups, and surveys, while the secondary research method is majorly focused on research where we can get that information through the literature, which is research that is already available. The primary source of this study is the speculative fiction named *Oryx and Crake* by Margaret Atwood. It is a dystopian novel that was published in 2004. The research materials were gathered through heuristics and hermeneutics reading techniques. (Nurgiantoro, 2009).

Results and Discussions

Merging facts with the fiction

Table 1
Genetically modified creatures

S.No	Creature	Combination
I	Pigoons	Pig and Human
II	Crakers	Hybrid version of human
III	Rakunks	raccoon and skunk
IV	Wolvogs	wolves and dogs
V	Luminescent Rabbit	Glowing rabbit modified gene of Jellyfish

Pigoons

Atwood's *Oryx and Crake* majorly focused on the transgenic elements, Snowman's father was a scientist. He was very much interested in the process of the transgenic field. For example, he extracted genes from one animal and artificially inserted them into the DNA of another. For example, he was the mastermind behind the project of creating pigoons, half-human creatures in the shape of pigs. Scientists made pigoons by putting a human gene into the DNA of pigs. This is called "gene splicing," and it is meant to make human kidneys and skin cells. Pigoons were considered a very important project at OrganInc Farm. Pigoons was the nickname for this project. The real name for this project was "sus multiorganifer." "Pigoon was only a nickname: the official name was Sus multiorganifer. But pigoon was what everyone said. Sometimes they said "Organ-Oink Farms, but not as often." (Atwood, 2004). Pigoons were often huge, merged with human cells, which were used as a container to grow human organs for organ transplantation. It was very cheap and easy to afford.

The goal of the pigeon project was to grow an assortment of foolproof human tissue organs in a transgenic knockout pig host – organs that would not only 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. A rapid-maturity gene was spliced in so the pigeon kidneys, livers, and hearts would be ready sooner, and now they were perfecting a pigeon that could grow five or six kidneys at a time. Instead of being destroyed, such a host animal could reap the benefits of its extra kidneys. (Atwood, 2004). This

xenotransplantation not only occurs in the fictive world, but it also happens in our modern, real society. "The breakthrough may lead one day to new supplies of animal organs for transplant into human patients."(Rabin, 2022). In an article called "In a First, a Man Gets a Heart from a Genetically Altered Pig" that came out in The New York Times on January 20, 2022, a 57-year-old man with life-threatening heart disease was given the heart of a genetically modified pig. This saved his life. Scientists have worked feverishly to develop pigs whose organs would not be rejected by the human body, research accelerated in the past decade by new gene editing and cloning technologies. A few months before the heart transplant, doctors in New York successfully put the kidney of a genetically modified pig into a brain-dead person.(Rabin, 2022)

Crakers

Crakers are the hybrid versions of the human beings created by Crake. He thought with his first project, through spreading the JUVE virus, he would turn the world pure by wiping out the whole human race. After the destruction of the human race, Crake planned to replace the human race with the Crakers. They are considered post-humanistic species. Crakers look like humans, but their activities are entirely different from those humans. "They are neither human nor animals."(Säfström, 2020), There is nothing distinct about them from nature. Crakers, or nonthreatened species. According to Crake, crackers are actual human beings. He created crackers to avoid overpopulation. Crake also made genetic changes in their reproductive systems. While creating female Crakers, he extracted the DNA from baboons and octopuses to indicate the males by showing blue colour in their stomachs when they are ready for the process of reproduction. She is not restricted. She can choose three males to be involved in the reproduction process. These genetic changes pave the way to avoid sex slaves and abuses, and there is no choice for prostitution. The population is minimal. They are aware of no starvation, so there is no chance to know what is rich or poor. Crackers are present in all colours and different sizes; each one has a different skin colour – chocolate, rose, tea, butter, cream, honey – but each with green eyes. Crake's aesthetic (Atwood, 2004).

Rakunks

Rakunks were genetically modified creatures that had the genes of raccoons and skunks. Jimmy got a raccoon as a pet for his birthday as a gift from his father. Jimmy named it the Killer. Jimmy's tenth birthday except the rakunk, brought home by his father in a carry-cage. It was a tiny one, the smallest of the litter born from the second generation of rakunks, the offspring of the first pair that had been spliced.(Atwood, 2004).

Bobkitten & Purring (Self-Healing Method)

One of the crackers got bitten by a bob kitten. It is a wild hunting creature, so the crackers cured the wound by purring. "A domestic cat's purr has a frequency of between 25 and 150 Hertz, which happens to be the frequency at which muscles and bones best grow and repair themselves." (*Why Do Cats Purr? | Purring | Live Science*, n.d.). Crake has included the cat genes in the Crakers, which helps with

purring. It is a self-healing method that uses ultrasound waves to cure cuts and scrapes. They reach the open space at the centre of the territorial circle... Children fall or hit their heads on trees; women burn their fingers while tending to the fires; there are cuts and scrapes; but, so far, the wounds have been minor and easily healed by purring. Crake had worked for years on the purr. Once he'd discovered that the cat family purred at the same frequency as the ultrasound used on bone fractures and skin lesions, they were thus equipped with their own self-healing mechanism. (Atwood, 2004)

Wolvogs and Luminescent Rabbit

Wolvogs are wild creatures created by merging the genes of wolves and dogs. This creature was designed to protect and is used as a guard dog. The next creature in Atwood's fictive world is the Luminescent Rabbit, which is green in colour and glows in the dark. It is made up of the modified genes of jellyfish, so it is soft and translucent. The same species is also present in the real, factual world. The rabbit named Alba, commonly known as a glowing bunny, is "engineered by splicing green fluorescent protein (GFP) of a jellyfish into her genome." (Philipkoski, n.d.). Alba died during the experimentation.

Conclusion

Through the post-apocalyptic vision of the novel, this story states that the growth of technology develops the abolition of humanity. Atwood's fiction shows that the protagonist, Jimmy, stands on the art side and the antagonist, Crake, stands on the science side. Where art is strongly overshadowed by science. But this research concludes that using technology in the right way can lead both science and humanity towards the top. The efforts of the snowman to disguise himself as God through the language are astonishing. Atwood's fiction draws attention as well as an awareness to preventing nature and humanity from the destruction of the human race. According to Atwood, the future is a place that will be inhabited by people. The important thing is that none of them will come back from that place. So, preserving and protecting nature is a duty that is mandatory for all.

References

- Akhter, T. 2021. COVID-19 Pandemic and Apocalyptic Literature: An Analysis of Margaret Atwood's *Oryx and Crake* at the time of Coronavirus (SSRN Scholarly Paper ID 3851757). Social Science Research Network. <https://papers.ssrn.com/abstract=3851757>
- Atwood, M. 2004. *Oryx and Crake*. Virago Press. <http://www.pdfdrive.com/oryx-and-crake-d191315734.html>
- Bergthaller, H. 2010. Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*. *English Studies*, 91(7), 728-743. <https://doi.org/10.1080/0013838X.2010.518042>
- Covid: Half of Europe to be infected with Omicron within weeks - WHO. 2022, January 11. BBC News. <https://www.bbc.com/news/world-europe-59948920>

- Glover, J. 2009. Human/Nature: Ecological Philosophy in Margaret Atwood's *Oryx* and *Crake*. *English Studies in Africa*, 52(2), 50–62. <https://doi.org/10.1080/00138390903444149>
- Philipkoski, K. (n.d.). RIP: Alba, the Glowing Bunny. *Wired*. Retrieved January 13, 2022, from <https://www.wired.com/2002/08/rip-alba-the-glowing-bunny/>
- Pinkham, K., Carnes, J. M., Fontenot, M. N., Garcia-Siino, L., & Connolly, T. (n.d.). ASSISTANT NONFICTION EDITOR. 119.
- Rabin, R. C. 2022, January 10. In a First, Man Receives a Heart From a Genetically Altered Pig. *The New York Times*. <https://www.nytimes.com/2022/01/10/health/heart-transplant-pig-bennett.html>
- Säfsström, F. 2020. A Whole New World: A Reading of Deep Ecology in Margaret Atwood's *Oryx* and *Crake*. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-81290>
- Why Do Cats Purr? | Purring | Live Science. (n.d.). Retrieved January 13, 2022, from <https://www.livescience.com/40377-why-do-cats-purr.html>
- Arnawa, I.K., Sapanca, P.L.Y., Martini, L.K.B., Udayana, I.G.B., Suryasa, W. (2019). Food security program towards community food consumption. *Journal of Advanced Research in Dynamical and Control Systems*, 11(2), 1198-1210.
- Nyandra, M., Kartiko, B.H., Susanto, P.C., Supriyati, A., Suryasa, W. (2018). Education and training improve quality of life and decrease depression score in elderly population. *Eurasian Journal of Analytical Chemistry*, 13(2), 371-377.
- Akbarov, A. N., & Xabilov, D. N. U. (2021). The condition of the oral cavity in patients who have had a viral infection COVID-19. *International Journal of Health & Medical Sciences*, 4(4), 381-383. <https://doi.org/10.21744/ijhms.v4n4.1796>