Abstract
Geopolitical anxieties entangled and emerged with the anthropocene, creating a collective imaginary of critical eco-dystopia in a fictive way. The imaginings of apocalypse evade the entire human civilization with its natural habitat, deluging the corpses to be laid onto the death-stricken bed of the world. Drawings on sight provide an anthropocentrism-critical approach toward the textual interpretation in general. This research article decontextualizes critical dystopian fiction and predicts the reality of biotechnology advances in Oryx and Crake. It expands on the eco-critical dystopian world to the point that it defines its long-term viability through compelling human insights that exemplify destructive acts. For instance, cybernetics, artificial intelligence, virtual reality, species splicing, and genetic engineering deploy the critical dystopic vision and transform the planet into a dilapidated globe, which becomes an untowelled world.

Keywords: Anthropocentrism, Dystopia, Cli-fi, Eco-critical dystopia, Sexualism.

Introduction
Dystopian imagination and climate change adhere to the cinematographic trends that are visible in many movies, fiction, and graphic novels, where anthropocentricity causes the dreadful issues that become the “reality” of the surreal fiction that interconnects with the “real” world. The writing of dystopian fiction depicts the disaster of the environment and the extensive anthropocentrism of the eco-dystopian novels that are observed through the usage of nuclear weapons, pandemics, ecological disasters, and many more. The argument of this research paper is that the imaginative eco-dystopian and climatic changes in fiction reflect reality, particularly the repercussions of biotechnology in the Oryx and Crake through the intervention of anthropology. This led to an urgency of ecological alertness and self-disaster that went towards the degradation of the environment itself.

“Apocalyptic visions have the power to transfix their audience with horror” This way, the people get shock about the data that driven force by “the long-term implications” of the reality in the novel (Hughes & Wheeler, 2013, p. 2). This apocalyptic vision can be detected through the Anthropocene Act, which has become an undeniable reality. For instance, according to the survey of the Journalist Schwägerl (2014), the release of COs (Carbon dioxide) combined with nitrous oxide produced by supersonic transports and odorless CFCs that impacted an adverse effect in the biosphere by a “factor of 5.4” can be seen from the late 18th century to the 2010s (p. 39).

Further, This inclination of the reality factor is only be understood fully with the “dystopian” counterpart, which is termed as “utopian” is equally important to understand as it constructs the ideology of unauthorized surveillance of the perfect society somewhere in the world that existed in the hope of a better future, where the literal meaning of “utopian” is “no place” and comprehends the society as idealistic and the government characterized as benevolent that ensure the safety and general welfare of the people. However, this idealistic government and society is hard to believe but a dystopian world is more believable. As a matter of fact, this dystopian and utopian fiction comes under the umbrella term climate fiction (Cli-fi), coined by North American activist and journalist Dan Bloom in 2007, which is engraved genre into the upcoming disaster films, series, and fiction. They elaborated science fiction into more advanced and broad terminologies. For example, as “eco-dystopia” can ameliorate the rapid growth of pandemic...
viruses, break down the entire ground due to some bizarre circumstances, use nuclear war to destroy the country, and bioengineering intervention aggravates the destruction of the current flora and fauna. The construction of the dystopic vision through the dilemmas of species extinction and global warming raises the struggle between the “natural” and the “artificial”. Thus, cybernetics, artificial intelligence, virtual reality, science, species splices, and genetic engineering initiate the critical dystopian vision and turn the world into a dilapidated globe, which becomes the untowelled world.

Major cities were destroyed, flooded, pandemic breakouts, or maybe set up by zombie attacks. The question arises, “Will these activities ensure human survival in the world?”. These engulfed scenarios perpetuate the imaginaries of dystopian fiction, as Lyman Tower Sargent (1994) as a non-existent society described in considerable detail and normally located in time and space that the author intended a contemporaneous reader to view as worse than a contemporary society but that normally includes at least one utopian enclave or holds out the hope that the dystopia can be overcome and replaced with eutopia (p. 9). Hence, Sargent, “critical dystopia” is a combination of utopia and dystopia, and they are somehow similar to critical utopia, “but they are darker and less optimistic” (Seyferth, 2008, p. 3). Also, Sargeant, Moylan, and Baccolini, with their similar intriguing interest in critical dystopia, astutely claimed that “social hope exists within the text” and that it is embedded somewhere in the “eutopian enclave or eutopian community” (Milner and Burgman, 2020, p. 99). Whereas Lepore highlighted the point of dystopia as despair fiction, he surmises:

“Dystopia used to be a fiction of resistance; it’s become a fiction of submission, the fiction of an untrusting, lonely, and sullen 21st century, the fiction of fake news and info wars, the fiction of helplessness and hopelessness. It cannot imagine a better future, and it doesn’t ask anyone to bother to make one. It nurses grievances and indulges resentments; it doesn’t call for courage; it finds that cowardice suffices. Its only admonition is: Despair more.” (Lepore, 2017).

The imagined better future is futile in the dystopian planet; normally, the catastrophe occurs in disguise in the sake of longing for a utopian society. It is surrounded by resentment, grievances and suffices cowardice. These remorselessly indulgent voices in dystopian fiction beg for help to save them from the future’s disaster. The devastating effects on the earth due to the wastes created by the sinful acts of modern men are changing the geological shift termed the anthropocene. This dying universe is clearly visible in Margaret Atwood’s Oryx and Crake.

**Climate Fiction and Anthropocentrism**

Texts that primarily function as climate fiction include Barbara Kingsolver’s Flight Behavior (2012), where devastating winters in Tennessee became succumbing for human beings, and Richard Powers’s. The Overstory (2018), where the destruction of forests is represented. These fictions are clear depictions of what climate fiction looks like; also, the connectivity transcends between the land and the culture; the rural or the urban possess the instincts of life forms that cannot sustain themselves without the proximity of one another. “The fiction becomes a reality” is never on board as the fact that is portrayed beyond the narrative context of fiction that represents the authentic outcomes of the anthropocene. Also, one of the major writers that show the atrocity of anthropogenic activity is Cormac McCarthy’s The Road, which constructed the narrative of a father and a son trying to survive in a barren land of the United States where hope diminished for the sake of reality; the struggle of a man and a boy can only hope they had to live for one another day in the world where there was only politics left for survival and ecology showed its deterioration. Also, the other major feminist writer like Margaret Atwood set her apart from “science fiction proper” and described most of her work as speculative fiction – “for me, this label denotes books with things in them” – utter epistemestes of knowing what can’t do or begin to do, beings that can be existed or not exist at all (Atwood, 2004, P. 513). This speculation of the fiction employs the exact copy of the planet earth but, more or less, a future that holds the power to transcribe the real things into it.

The societal upheaval tempted the world to engage in totalitarianism, i.e., the rise of powerful dictators like Stalin and Hitler in the second half of the century. The desirability of an illusionary utopian society is unresolved and based on false hopes. We can understand that this false utopian society from Aldous Huxley’s Brave New World (1932) showed the downside of the perfect utopian world of technological advancement. Also, in Animal Farm (1952), George Orwell pointed to the political intervention of misguided leaders to deescalate the proliferation of society, while in 1984 he envisages the ultimate nightmare of political centralization and government control over citizens. (Bildariu, 2013, p. 56).

Paul Crutzen popularized the term anthropocene as “a new age defined by one creature – man – who had become so dominant that he is capable of altering the planet on a geological scale” (Crutzen, 2002, p. 24). The dominant key in the anthropocene is the preconceived notions regarding the superiority of humans over nature and other beings. The reckless behavior of consumption of natural resources makes it to the verge of extinction – This precedes the anthropocentrism using the other than humans as their own needs, regardless of what the consequences of it. In regards to Oryx and Crake, Atwood distinguishes the two hierarchies of humans and animals with two arbitrary. Atwood contrasts anthropocentrism in science by presenting a contrast the arbitrary relationship between humans and animals. The destruction of elements of nature is the advancement of anthropocentrism. Atwood takes the idea and portrays a society where “NooSkins for Olds occurs,” describing the humans’ experiments on other humans to attain flawless skins, from which later most of the humans suffer (Atwood,
2003, p. 55). This liberal society sometimes takes animals as test subjects, including humans.

**Biotechnology and Ecological Utopianism**

In dystopian fiction, it is easy to contemplate the cultural anxieties and threats they pose to the environment. Sustainable development in the catastrophic dystopia is not one of the positive outcomes; the more time passes in the dystopian world, the greater the efficiency of the sustainability of the resources, which is most likely to be in an exhaustive state. This possible sustainability outcome is explored in the fiction of *Brave New World*, which embodies the deterioration of the environment and differs from the tipping point of alteration of the climate (Windsor, 2018, p. 4). Allison Dunlap (2012) argued that “human beings are inherently deserving of lowering ethical treatment and that the quality of treatment they receive should not be based on an unjustifiable hierarchy” (p. 1). This hierarchical system coincides with the capitalist economy to create a moment for establishing a new environment within the ecosystem to create utopianism that is confined within the periphery of the compound.

Another approach is "eco utopianism or ecological utopianism," which underlines the notions of being in harmony with other animals and sharing abundant resources with others other than humans. Ernest Callenbach published a utopian novel, "Ecotopia: The Notebooks and Reports of William Weston," in 1975, where he described a not completely utopian-dominated society but a little flawed one, longing to improve the ecology for the betterment of society. It deals with the affluent culture of the counter culture and green movements during the 1970s and thereafter. He further states that they provide protection and stability to the environment to explore its interconnectedness with gender, class, region, and humanity. The exploitation and continuous degradation of the environment are pursuits of balancing between humans and ecology, as Callenbach endorses exploring the idea of “sustainable economics” and “ecological economics,” trying to subsidize the exploitation of the anthropocene by means of capitalism (Chang, 2005, p. 253). In terms of the ecology aspect, we can also see Margaret Atwood’s *Oryx and Crake* (2003) as one of the examples of human over animal hierarchy and the establishment of an ecotopian world that negatively impacts animals and nature through biotechnology and turns an ecotopian vision into a more dystopic world. Utopian reality authorizes the contemporary world that unhinged society to corrupt the proper function of the environment and civilization, ultimately having a transition to becoming the reality fiction of the dystopian version.

The novel specifically highlights individuals’ unified identity and presents human superiority over animals, the environment and other than human beings. The pious and unique supportive relations between the hybridity of human-animal or animal-animal is not emphasized in the novel’s narrative. However, the use of hybridity is mentioned in the novel with the advancement and enhancement of the existing species through biotechnology. Basically, the technique is to inter-genes splicing of one species to another species, particularly, the fusion or grafting of different animals. But this hybridity of the animals is not a desirable solution to the environment of the dystopian fiction of Margaret Atwood. These animals directly threaten their natural habitat, made only because of the megacorporation’s commercial benefits. Even studies have been conducted around the world of the production of human-animal hybrids. There has been a study in 2017 on a paper entitled "Interspecies Chimerism with Mammalian Pluripotent Stem Cells" by scientists at the Salk Institute who shared their findings about a Chimera Project. Chimera understands an organism, including cells from too many distinct entities, that is broadly used in the novel to make it more precisely the consequences of the dreadful events of biotechnology. Salk Institute also announced that they had finally managed to grow human cells in pig embryos.

These “genetically engineered” gene deleting or manipulating the species’ genes have already been adopted into the guidelines developed by the Canadian Council on Animal Care (CCAC). The Canadian Council provides clear instructions on genetically engineered animals with the specified definitions as “an animal that has had a change in its nuclear or mitochondrial DNA (addition, deletion, substitution of some part of the animal’s genetic material or insertion of foreign DNA) achieved through a deliberate human technological intervention” (Ormandy et al., 2011, p. 544). In the novel, the production of the ChickieNobs, a genetically modified strain of fast-growing and headless chickens, explains that these chickens do not need any growth hormone as “the high growth rates built it. You get chicken breasts in two weeks… And the animal welfare freaks won’t be able to say a word, because this thing feels no pain” (Atwood, 2003, p. 203). Another hybrid animal, for instance Wolvog which is a hybrid of certain wolf and canine species that is created for the security of the CorpSeCorps However, their descriptions their rampage: “As for the real dogs, they never stood a chance; the wolvsogs have simply killed and eaten all those who’d shown a vestigial domesticated status” (p. 108). Since, these conceptions related to the ideology of hybrid animals in the dystopian world can barely have any solutions to the environmental collapse.

Margaret Atwood represents the genetic splices including a xenotransplantation mixture of different transgenic splices to build a unique creature intended to be the newly created creature that has both the characteristics of animals, like bobkittens, biolambs, and rakunks—hybrid animals—that further became the reason for the anthropocene on a larger scale. The corporation made the
newly hybrid animal pigoons—genetically modified pigs—to harvest organs similar to humans for use in corporation surgery on humans, but that intended to become intelligent beings after “successful growth of human neo-cortex tissue in the brains” (p. 150). Oryx and Crake became self-sufficient to predict the possible predicament of the distant future.

This transplantation on companion animals can also be seen in the “Glofish” – a combination of “genes from sea anemone and jellyfish, zebrafish have been genetically engineered to express fluorescent proteins” (Ormandy et al., 2011, p. 544). This biotechnology in the genetically transformed animals have hugely impacted the Atwood dystopian novel. Also, big corporations replaced the government and transformed themselves into dictatorship-forced totalitarianism regarding the public and private sectors. With the effect of biotechnology, we can observe, that there is no regulatory approval body to regulate the drawbacks or any planetary harms because of the corporation of those who using the biotechnology for their commercial benefits as “there are no lawyers, courtrooms, regulatory authorities or delays at HelthWyzer and Rejooven Essence” (Sanderson, 2013, P. 236). Indeed, the failure of the regulatory bodies in Oryx and Crake, the possibility of the application of biotechnology is widespread.

Xenotransplantation, the posthumanist venture, induces a world dominated by pandemic viruses, such as the JUVE lethal virus, to eliminate the entire human race. Animal hybrids like pigeons, rakunk, wolvogs, and transhumanism crakers remain the dominant species of the new ecology and their challenge is to build up their dominance. The snowman, a.k.a. Jimmy, threatened to think about or critically understand the new era of transgeneics of humans DNA creatures like pigeons and crakers. This ethical transgression of the new era is grotesque for other pre-pandemic human survivors. The fine line between the last human survivors and transgendered crakers lies in inheriting the same blood line that bounds them together.

The dangerous path of anthropogenity, or excessive human interference with technology and the earth’s natural ecology, poses a question in the novel: “What if we continue down the road we’re already on? How slippery is the slope?” (Atwood, 2003, p. 383). In the novel, the virus breaks out and wipes out half of the entire population, Crake replaces the humans with the genetically modified race, which called as the children of Crake or Crakers. Crake is the mastermind of breaking out of the contagious virus for the utopian plan. The incongruities of the exploitation of humans and animals, overpopulation, and environmental degradation influenced Crake’s lethal actions. Crake longings for simplicity, preserves the world from atrocities and eliminates all sufferings of humans and animals. Hence, he wants a new life form that does not have any intrinsic human weakness and has the pleasure of Edenic existence. From Glenn and Crane’s perspectives, the cause of the destruction of nature is solely humanity. Crake’s human-centered innateness problematizes the use of scientific knowledge and provides a utopian plan called the “Paradice Project” (p. 302). For the sake of realization of this utopian thought, he decided to exterminate all human beings because they thought these peoples were “nothing less than the ancient primate brain” – the innateness destructive nature of humans also will vanish with the current illness they carry (p. 305). Racism, territories, or any kind of kind, civilians with the superior right were extinguished with the advent of this Paradice Project. The humans for Crake is the plague that causing the most harm in the planet.

The use of biotechnology to create “gene splicing” that allows the biotech scientist to edit the genetic material of an organism and combine the traits of the other organism Crake’s monogamy concealed human-centric understanding in the new species by changing the entire mechanical features of destructive, register, hardwiring, and unwiring. However, Crake wants to provide a sustainable solution to made the utopian society to solve the entire environmental problems with the help of the ‘Paradice Project’ and using to technology to make a new species because he thought that “as a species, we’re in deep trouble” (p. 295). Crake reinstates the outcomes as he wants to limit or possibly stop completely the production of humans to solve the problems of overpopulation and overconsumption. The condition of the world is dilapidated with overpopulation that eventually leads to habitat loss, pollution and famines. In the hope of finding a solution, Crake develops a drug that enhances the sexual performance of people with the prevention of sexually transmitted disease. In the contrary, these drugs sterilized the users without the knowledge of the concerned person. The test subjects that Crake taken were mostly humans during the clinical trial of the drugs, Crake delivers his report that clearly mentioned the test subjects of humans treated as mechanical objects: “Several [test subjects] has assaulted old ladies and household pets” (p. 295). The trails were numerous in the subjects “Also, at first, the sexually transmitted disease protection mechanism had failed in a spectacular manner,” with, sometimes, the side effects of the trails consisting of grown a “big genital wart over her epidermis” – these trail and error methods were merciless, even if, its temporary (p. 295). Eventually, the Crake succeeded to find a best solution to cure the planet with the cost of vanishing the entire humans.

**Human Bodies and Identity**

The French physician Julien Offray de la Mettrie further radiated Descarte’s mechanistic philosophy in L’homme machine (1748) by declaring the soul as another biological product. Transhuman Crakers are a newly invented species created through xenotransplantation, generating new bodies. In order to create a new species, they dismembered the humans and created a new substitute for human
genetics: With the rise of science and technology, the anthropomorphizing of machines, the (bio) technological perfectibility of the body and the possibility of artificially (re) creating and mechanizing a (human or non-human) self-became contrivable for real, and nature/biology appeared as a mere blueprint for the technological replication of the body. (Mohr, 2015, p. 284)

Technology promises a utopian society with the amalgamation of nature, providing the autonomy to give the world and build an eco-friendly natural world without sabotaging human values, ethics, or nature. However, from a utopian perspective, technology created a harmonious world. When the critical dystopian arrives, the ill-effects of the same technology barren the islands, becoming the ultimate reason for imbalances in human-nature harmony, new species are generated through xenotransplantation called transhumanism and cyberhumanism. The hyperactive cyborg is indestructible, invincible, and irreparable, as shown by Anne Balsamo in Technologies of the Gendered Body (1996) and in The Terminator (1984) and Robocop (1987), affixing new gendered body figures of masculinities and breaking the existing gendered binaries and conservative gendered roles.

The constructions of human gender politics revert back to the interpellation of slavery that women have suffered through the ages in the dystopian world. The hierarchy of gender sexuality has been jeopardized because it is habitually contradictory to male sexuality and conflates heterogeneity with sexism. Not only the construction of the gender normative convention that imposed them, but also the dystopian society of the predictable dystopian future. For instance, postmodernist female writer Margaret Atwood’s Oryx and Crake, 2003, demystifies gender binaries. As Dunlap stated that “human bodies” can be decapitated in need of “market demands – subjects to be objectified and commodified, just like a “harvest child” kept as in an “illegal baby orchard” as easy as make Oryx as an indulged into child pornography (p. 7). In Gender Trouble: Feminism and the Subversion of Identity (1990) by the Gender critic Judith Butler’s theory of performativity formed “the limit of the social constructionist account of gender” (as quoted by Irshad and Banerjee 586). Since human civilization was cultivated, gender identity has been constructed through the repetitive behavior of patterns implemented by the society that formed throughout the centuries. This is how gender evolved from their own specific behaviors. As per gender norms, the principle of individual identity progressed and led to varied and distinct formations of identity established through self-reliable identification. As Butler argued, gender identity is formed through certain reiterative acts, and there is “no doer behind the deed. The doer becomes formed from the doing” (Rachel Alsp et al., 2002, p. 99). Oryx and Crake is a 2003 futuristic dystopian fiction about the bio-engineered humanoids crakers ruling the world after the apocalypse as they are the only ones properly immunized against the deadly virus spread by its creator, Crake. Jimmy, the protagonist, considers himself the last person on earth bound to live with the humanoids, and Oryx, the female character, who gave birth to craters before dying, represents the strong character of a female protagonist.

Oryx is being represented as “practical and reasonable” in her approach, whereas Jimmy is displayed as “emotional and sentimental” (Irshad and Banerjee, 2012, p. 589). Jimmy’s mother, Sharon, left him when he was a child, and that helplessness because her mother unsuspiciously left the home makes Jimmy vulnerable to living without a mother or a feminine role model in the home, which led to overruling patriarchy and the sexual apprehension of male sexual desires that coherently conversed with the idealization of men as oversexualized creatures. Also, Atwood’s female protagonist in The Robber Bride, Tony Fermont, condition compared with that of Jimmy. Meanwhile, Jimmy regrets the process of his mother’s abandoning him and making him think of himself as an undesirable son. Atwood demonstrates sexuality or gendered humanoids to de-establish the hierarchical structure of gender, sexual orientation, height, skin color, and eyes. The humanoids are basically genderless, which prohibits the possibility of inequality in the world and makes everyone equal. The exploitation of weaker and stronger vanquished As Atwood mentions, “hierarchy could not exist among them because they lacked the neural complexes that would have created it” (as quoted by Irshad and Banerjee, 2012, p. 592).

The construction of masculinity presumes a superior yet stronger companion with better emotional intelligence than women who are not capable of logical reasoning. However, the story progressed, and later Jimmy’s father had illicit sexual relations with lab technician Ramona, creating an idealistic response to toxic masculinity. The illegal intimate relationship between Jimmy’s father and Ramona was transparent and involved activities like “bouts of giggles and growly sex going on behind the doors that were closed but not soundproof” (Oryx and Crake 74), constructing an ideology of women as commodities and entities that Jimmy follows later in his life. This ostensibly influenced Jimmy’s mind to opt in a certain way.

Conclusion
Margaret Atwood's Oryx and Crake (2003) highlight the man-made catastrophe and humans' intention to corrupt humanity by establishing the existence of a “new species” that has no emotions and no human literacy to further the denomination of the world. However, the society in Oryx and Crake was already corrupted before the apocalyptic event. The novel proximately addressed, somewhere, part of Brave New World (1932), explicitly exhibiting the scenarios of fifty
years into the future, mostly of corporate dictatorship, global warming, and collapsing civilization. Moreover, problems like high school drug consumption, computer gaming, live executions on the internet, a euthanasia website, and pornography aplenty resemble much of North America. Also, the novel explores the intensity of biogenetics in the intersection of cultures and thus presents genetic engineering cause of a destructible future, or an inevitable circumstance that not even genius scientists can eradicate. Atwood emphasizes not the perfectibility of the benefits that seek for the biotechnology on the human body and mind; but rather exemplifies the major ecological crisis, cultural imagination and biotechnology that can possibly bring upon the planet. She also presented the interconnectedness of the hybrid animal and non-human being crakers that have the potential to illuminate the possible future.

Atwood’s science fiction is entirely “inspired by the urgent social importance of scientific fact” (Squier, 2003, p. 1154). The emphasis on what the normal world becomes the world that people do not think of, obviously, with the intervention of the science and technology; that’s what the novel precisely discusses. The ignorance of environmental well-being and the overcrowded cities with the slums divided into two separate compounds; just to distinguish the hierarchies of superiority over inferiority would not make such a difference. In the end, the world collapsed with this manipulative society, which definitely faced the consequences of catastrophe if humanity continues to be ignored.

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