

Literature Sustains Life: The Scientific and Technological Advancements in the World of Fiction.

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Abstract

Climate change is one of the most challenging concerns of the twenty-first century. Literature, over the ages, has been influenced by the psychologies of people living in changing times. Climate change presents numerous challenges to cities not only centred on the terms of vivacity and sustainability of the urban ways, but also in terms to how urban inhabitants visualise the upcoming inaccurate urban milieu. The scientific and technological advancements in the world has transformed earth and earthly evolution into a trap. Many novels portrayed different concepts as a metaphor for the different directions in which humanity can explore and end up with one of two believable futures. Utopias and dystopias are usually seen in science fiction and other theoretical fiction genres. In our modern environment, works of fiction are focused on the futuristic visions of dark dystopias. These visions of revolutionary worlds produced some of the most famous novels, movies, comics and music of our time. Many philosophers and authors viewed fiction with visions of the future where totalitarian rulers governed the life of the common citizens. Their works explored many themes of dystopian societies such as suppressive social control systems, government strong-arming of citizens, influence of technology on human mind, managing mechanisms, individuality, freedom of life and speech, restriction, sexual repression, class distinctions, artificial life and human interaction with the nature. Thus the imaginative faculty of the author creates the disastrous pictures of the world by spreading the contemporary problems to an extended that lead entire humanity towards the peculiar end. The present paper deals with the environmental crises reflected in the select novel of J. G. Ballard. The dystopian world created in this novel is the result of the clash between Nature and Culture.

Keywords: dystopian fiction, science fiction, technological advancement, humanity, ecology, environment.

In addition to imagination, the influence of language cannot be deprived of from the writing process and language become a key to reach human in modern era. From the Hellenistic period to till now, artists and writers have tried to be close to nature through their artworks, with the language they applied in their works and their style. Ecologically oriented Literature creates a tremendous impression. Based on this regard, the ecological crisis is a good watchword to signpost the urgency of the situation.

Dystopian Literature is defined as a subset of the larger group of anti-Utopian literature that satirizes Utopian thinking. It stands isolated based on other anti-utopian writing, offers an alternate view of social potentialities it has its concern with the complications of both political and cultural context with a dogmatic element. Dystopian fictions always offer some kind of warning of what will happen in future.

The Dystopian Protagonist often feels distress and struggles to escape. He is identified as the one who questions the existing social and political systems, hence believes that something is horribly erroneous with the society and helps the audience to distinguish the negative aspects of the dystopian world through his or her perspective.

The dystopian genre comprises the concepts related with the Environment, Class Inequality, Corruption and Capitalism, Gender issues and Science or Technology. The Dystopian themes are mastery of nature based on the point that it becomes sterile, or turns against human life. It portrays technological advances that enslave humans, regiment their lives. A collective loss of memory and history making mankind will become easier to manipulate psychological crisis that ultimately end up with dehumanization. Thus Dystopia is the condition of the place that becomes extremely bad or unpleasant. The general setting of the dystopian novel will be a change in weather condition and the state of the environment reflects critical factors. In a dystopian society there is chaos, calamities, illnesses and the natural environment will turn harsh. These novels portray war, revolutions, suffering and death.

Clayes pointed out that, Dystopia originated by combining two words “dus and topos” which mean “a diseased, bad, faulty, or unfavourable place” and is applied for the first time in the eighteenth century (4). Dystopia as a concept came out under the name of ‘dustpia’ in 1747, and then it was named as ‘an unhappy country’ in 1748 (273). It is used to describe the disorder, destruction and devastation during the upcoming days. Dystopia can be defined as a dilemma “...between illusion and truth, power and helplessness, and the problems which arise when sectors collide that humankind can and cannot control” (Curl & Brittain- Catlin, 2019, p. 334).

Literature is one of the best ways to generate frightening scenarios in which humanity suffers from hunger, lack of water, extreme colds and burning hot. Human is portrayed as the cruel and selfish character in the dystopian novel who suffers because of their irrevocable damage on earth. Nature is utilized thoughtlessly for the sake of the benefit to save human. Human is a hopeless character and there seems no way to escape or be saved from crisis. The careless behaviours of humankind has been resulted as a challenge of justified reaction by nature such as; floods, drought, fires, and more in as depicted in a dystopian novel.

In dystopian novel, nature plays the role of both the victim and the prey of human and the revenging character of the story. In these novels nature uses its own power to take revenge from a human who is nothing more than a tiny creature when compared with nature. It is an unquestionable fact that the future world is created by human himself, since it has run short of the non-renewable

sources for the sake of humanity's ease. As a result of human deeds, the inevitable outcomes of global warming are famine, floods, and extreme imbalances in temperatures.

One of the main themes of dystopian novel is alienation which means that the novel concentrates on remote locations. These locations and times are filled with full of symbols that create an unfamiliar effect on the reader and allow them to undertake a deep understanding of the environmental problems that are caused by mankind. The atmosphere of these novels will be gloomy, darkened, gritty, grim, and have a heavy focus on decay and loss. There are undesired natural disasters such as floods, tornadoes, and hurricanes. In a dystopian novel, time is preferred from the near future and it is apocalyptic.

The amalgamation of ecology and dystopian novels touch the main elements of the literary works. Humans and nature play a vital role in building up a refined society. Future is shaped by the changing ecological conditions as caused by human deeds. Thus people are exhausted, hopeless, aimless and despaired and they are lost. To the same animals and plants experience metamorphoses and as a result the balance of nature is collapsed. The settings of the dystopian novels are determined in unity with the needs of the disastrous futures. In the novels the places are portrayed with detailed paragraphs displaying all the worst possibilities of the future of the earth. Further, time is occasionally unspecified, and is chosen from near futures to make the plot more reliable and realistic. Thus in literature there is a connection between science fiction and dystopian novels by ecological portrayal. Hence there occurs a need to have a look into science fiction.

Right from the fantasy elements in the Epics, ancient technologies in *One Thousand and One Nights*, Flying chariots in *Ramayana*, Alien worlds in *Gullivers travels*, *Time machine* in Wells' fiction, scientific creed in *Frankenstein*, these fiction of fantasy has determinedly rooted its occurrence over centuries. The twentieth century was marked with intense attraction for science and technology. Eco consciousness has been the thoughtful concern of science fiction. The flying saucers, Space shuttle, rocket ships, humanoid robots, techno andys, alien invasion and travel to Mars were recognised as elements of scientific folktales. These tales characterised the history of humanity's perceptions over space and time, the conflict of the natives and the aliens, and the position of the human kind in the cosmos. These tales are usually recounted with the nova as metaphor in a serious scientific language of evocative abundance. Science fiction uses reasoning cognitive narrative strategies to explain the tales of love and hatred in the environment of the Android world.

Through dystopian novel and science fiction authors tried their level best to portray the future world and they tried to highlight the disastrous outcome in ecological world. All natural world is related with man and thus they wanted to change the human race. Hence they adopted six ways to save the earth through their support by ecology works, writers and critics. The first one is to limit the rate of population because the increasing number of the human race resulted as a threat to other creatures and limited the needed sources. The second one is saving on natural sources which will be vital for the later generations. The third one is doing with less instead of trying to misuse in the form of exploiting the environment as if everything on the planet belonged to human beings. The fourth one is recycling and utilization of waste as well as planting trees, filtering the air and providing an environment for water purification. The fifth one is respecting environment by preserving its nature and putting an end to radioactive activities, thus by adding to the military and industrial experiments on nature. The last one is love of other species and signification nature. These strategies allow the reader a better acceptance of the earth and what role the human is involved with in the global warming process beside all the other disasters other creatures have experienced in through history and will be visible to in near future.

Ecology novels are environmentally conscious. In short, the role of human in eco-fiction as a character is dual; wrecker and recovered. Nature is the main source for the wellbeing of existence and it encounters mankind with its rules and elements. Further, nature has limits which restrain human from the exploitation of the sources and react in case of overuse. Consequently, human needs to be aware about the strong bond between them and nature.

The Setting of the ecology novel consists of the surroundings where the characters continue their lives and the period of time when the story occurs. The details of the location, climate, weather, or social and cultural surroundings can be found in setting. In ecology novel, time is an essential element because all the destructive deeds of human occurred in a long time period since it is not taken seriously but humans involved in continuous polluting of the environment unconsciously. Yet, time is not in the centre and it is not specified by the author now that the basic idea of a writer is to illustrate the long term results of man-centered actions on nature. In eco-fiction novels the author uses the places such as forests, mountains, rivers and nature itself. The target is to create a longing towards nature and a turn to the inside of a human. Real names for the places applied in setting are noteworthy in that it becomes easier to let readers feel wild in its reality.

In order to highlight the importance of literature in sustaining our life, this paper analysis three novels based on ecological crisis and androids as reflected in science fiction and dystopian novel in a simplified way. To achieve the public awareness, eco-fiction and dystopian novels are among the best ways to relay the hard truths to the reader. The characters and setting in eco-fiction works are similar; for instance, the human is damaging side while nature is the victimized character. A dystopian novel can be identified as a kind of menacing literature in which nature takes revenge and the balance of power changes while the setting is unwanted but probable. In this regard, eco-fiction and dystopian novels can be counted at the top of the literature of reaction. Both have a deep effect on the reader and have desire for a better future while warning their audience. In this study, eco-fiction and dystopian novels will be handled with their structural features such as their characters; human and nature, and their settings; time and place. The paper aims to put forward the impact of the interrelation of ecology and dystopia on the fictionalization process of the contemporary novel through three examples; *The Windup Girl* and *The Water knife* by Paolo Bacigalupi, *The Drowned World* by J.G. Ballard and *Do Androids Dream of Electric Sheep?* By Philip Kindred Dick.

The novel *The Windup Girl* (2015) by Bacigalupi has written a short story, more than a novella, which needs to be enlarged and become a well-plotted novel. The world in the novel is focussed on energy and natural assets and their extermination more than overpopulation issues. In brief, Bacigalupi uses the power of writing to portray the real face of hyper capitalist system and in order to achieve his aim he "remaps global capitalist geopolitics, interrogates the future of the nation-state in the face of transnational corporations, and explores the dynamic between capitalist commerce and ecological sustainability" (Hageman, 2012, p. 284).

The world in the novel is described as a place with experienced intolerably economic, political and ecological conditions. Destruction of non-renewable sources leads to radical economic effects and a global crisis occur. In addition to all the problems with food, due to ecological crisis, global warming turns all the systems on earth upside down. The world as described in *The Windup Girl* is not fully based on imagination because in the novel there are some of the stages witnesses climate change and loss of biodiversity while some are related with oceanic acidification, changes in land use, and chemical pollution. Finally the novel highlighted the genetic modification that affected the social and the political life intensely and thus results in outbreak of disease with genetically programmed immunity and wars.

The Water Knife is a powerful work that reflects the cruel order of capitalist powers during a drought which arouses the destructive and hostile impulses of people. The gloomy, the blood, and thunder in the novel reveal the inevitable results of the ecological ruin and the human responses in these hard times are portrayed. As Hector Tobar emphasizes in his article *The Water Knife* is “a vision of the near-future that borrows heavily from the strangeness and conflicts of present” (2015). It can be concluded that the undesired scenarios presented in the novel are not far from the real future and the displeasing future is due to the deeds of humanity.

In *The Drowned World*, the average temperature around the Equator is 180 degrees and it is climbing, also glacial melting at the polar is so fast that Europe is ‘a system of giant lagoons’, the America Midwest is ‘an enormous gulf opening into the Hudson Bay’, and the global population huddles within the Arctic and Antarctic Circles. It can be concluded that J. G. Ballard represents his views on the global warming and its promising concerns through this novel. According to Clarke, “Ballard's solitary protagonists traverse liminal states, often as psychological as physical, in which civilization recedes to the status of memory, and existence comes to be dominated and defined by the environment and its monothematic transformation.” (7). The protagonist of the novel, Robert Kerans, a marine biologist, is one of the last guests of the hotel, as one of the last five million inhabitants, and he works with a group of scientists. Living on a testing station is a difficult duty, yet Keran and Bodkin try to do their best to map the shifting keys and harbours and to transfer the remained inhabitants.

Throughout the story these scientists and inhabitants of the city have experienced extreme heats, encountered mutated animals, witnessed diseases such as skin cancer, tried to survive among the giant creatures and had frightening dreams which consist of archaic memories. At first “Kerans and later Strangman and Bodkins come to realize, the increase in temperature is not a symptom of climate upheaval; climate upheaval is itself a symptom of devolution, which is the underlying cataclysm.” (Clarke, 2013, p. 9). At the end of the story there is a resolution, the level of water decreases and a ray of hope appears. In *The Drowned World*, time is used as the symbol of archetypal memories which underline human awareness. Jim Clarke claims that “If Ballard conflates climate with time, he also conflates it with psyche.” (2013). It can be analysed that people get accustomed to the changing conditions in time and they are trying to live even in the worst conditions. People are trying to escape and find new places to survive on and “Now they were to abandon yet another city.” (19). The abandoned places are applied to create the feeling of isolation.

The science fiction of Philip Kindred Dick is a manifestation of the unparalleled and unpredictable challenges of man in modern times. Man's efforts for recompensing what he had destroyed becomes blur the line between real and unreal. *Do Androids Dream of Electric Sheep?* highlights the revolutionary mood of nineteen sixties, the rebellion of the youth and marginal groups against the widespread beliefs and values. It also replicates the anxieties of atomic age, cold war paranoia, and McCarthyism. The post-apocalyptic novel of *Do Androids Dream of Electric Sheep?* is the story of a distressed society after the atomic war that resulted with the death of people and the elimination of different animal species. The remaining population's health is susceptible by radioactive dust, and the ones who are already affected by it are known as chicken heads. The others are motivated to emigrate to Mars to stay safe while they are provided with android servants as elevations. The new generation of the androids rebel against their human masters, kill them and escape to Earth. The novel has more to offer than atomic bombs' demolitions and androids that murder, it deals with individuals' worries and struggles in a modern society. It deals with psychological, social and political issues of Dick's time by presenting the dark side of modern life such as the negative impacts of capitalism, consumerism, and technological progressions. The novel presents the oppression of the marginal groups, reconnaissance, isolation and loneliness, and the power's treacheries. *Do Androids Dream of Electric Sheep?* is a portrayal of a ruined society operated by power. This study enables a brief analysis of Dystopian Literature, Ecology Novels and Science Fiction and concludes that Literature through all its form as written works by various authors sustains life and thus in it plays a significant role in human life.

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