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ENGLISH LANGUAGE AND LITERATURE**

**IMPACT OF POLLUTION IN *THE SHEEP LOOK UP, STAND ON
ZANZIBAR, THE JAGGED ORBIT* BY JOHN BRUNNER**

M.A. THESIS

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KABUL VE ONAY

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Hussein Ibrahim ALDUGHAIM



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John Brunner’in *The Sheep Look Up*, *Stand on Zanzibar*, *The Jagged Orbit* Romanlarında Kirliliğin Etkileri

ÖZET

John Brunner’ın fütüristik ekolojik gerilim filmleri, kirlilik biçimlerini ve yakın gelecekte gezegen ve insanlar üzerindeki kaçınılmaz etkisini açıklıyor. Brunner’ın dehşet verici ve iç karartıcı romanları, belirtilmeyen yakın gelecekte çevresel, küresel ve politik bir felaketi temsil ediyor. Bu romanlar, dünyanın artan yıkımının potansiyel sonuçlarına dramatik ve peygamberlik bir bakış sunuyor. Hava kirliliği çok kötü ve yaygın bir şekilde yayılıyor. Herkes kirlilik nedeniyle birçok hastalıktan muzdarip gibi görünüyor. Temiz hava soluyamayız, tatlı su içemeyiz, sağlıklı yiyecekler yiyemeyiz ve hatta yüzmek mümkün değildir. Ayrıca, hiç kimse filtre maskesi olmadan dayanamaz. Tüm doğa’ nın bileşenleri kirlidir. Kirliliğin ana nedeni modern teknoloji ve suistimal etmektedir. Kirliliğin bir başka nedeni, doğa kaynaklarının tükenmesine ve kirliliğe neden olan aşırı nüfustur ve biz (insanlar olarak) de katılıyoruz. Irkçılık ve eşitsizlik nedeniyle, insanların birbirlerini ve doğa kaynaklarını öldürmek ve yok etmek için füzeler ve nükleer bombalar gibi birçok silah kullandıkları dünyanın birçok yerinde savaşlar başlar. Yani kirliliği: hava, su, gıda, toprak her yere yayılıyor ve bu nedenle bu araştırma insanın açgözlülüğünü, cehaletini, ırkçılığını ve aşırı nüfusunu eleştiriyor. Ayrıca kirlilik biçimlerini ve üç romandaki etkisini tartışıyor.

Anahtar Sözcükler : John Brunner, Kirlilik, Koyunlara Bakmak, Zanzibar, Jagged, Yörüngede Durmak, aşırı nüfus, ırkçılık, distopi, Pürüzlü Yörünge bilim kurgu.

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Impact of Pollution in *The Sheep Look Up*, *Stand on Zanzibar*, *The Jagged Orbit* by John Brunner

ABSTRACT

John Brunner's futuristic ecological thrillers explain the forms of pollution and the inevitable impact on the planet and humans in the near future. Brunner's terrifying and depressing novels represent an environmental, global and political disaster in an unspecified near future. These novels offer a dramatic and prophetic look at the potential consequences of the escalating destruction of the earth. Air pollution is so bad, and it spreads widely. Everyone seems to suffer from many diseases because of pollution. We can't breathe clean air, drink fresh water, eat healthy food or even swim. Furthermore, no one can endure it without a filter mask. All nature components are polluted. A major reason for pollution is modern technology and abuse. Another reason for pollution is overpopulation, which causes depletion of nature resources and pollution and we (as humans) are a part. Because of racism and inequity, wars break out in many places of the world, where people use many kinds of weapons such as missiles and nuclear bombs to kill and to destroy each other and nature resources as well as. So pollution of: air, water, food, soil spreads everywhere. Therefore, this study criticizes man's greed, ignorance and racism and overpopulation as well. And also it discusses the forms of pollution and its impact in the three novels combined.

Key words : John Brunner, pollution, overpopulation, racism, *The Sheep Look Up*, *Stand on Zanzibar*, *The Jagged Orbit*, dystopia, science fiction.

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ÖZGEÇMİŞ

ORİJİNALLİK RAPORU



Science Fiction and Eco-fiction

Since ancient eras, there was a strong connection and a link between humans and the environment; it was a kind of friendly and fraternal friendship. The environment includes interactions of all living species, climate, weather and nature resources. And because of illegal human activities and misbehaviors, we face potential destruction to ecosystems. Therefore, some authors had created what we called science fiction and eco fiction. Science fiction is one of the literary arts based on the writer's imagination, as the fictional novel or story includes political or social systems based on contemplative scientific discoveries and environmental changes, imaginative concepts such as futuristic, global and environmental disasters. It often explores serious consequences because of man's greed, ignorance, overpopulation, racism, the planet's climate and the ecological changes as well. In this respect, the author imagines a fictional world in the near or far future and uses science and technology to foresee the further development of the world or to present alternative vision of the development of the world. Additionally, the writer portrays potential threats to mankind and nature which we will face in the future. Moreover, it encompasses works of fiction, human impact on nature, fantasy, mystery and magical realism as well. We should not forget that human rights, animal rights and the environment are so closely intertwined; seas, oceans, plants and everything deserve a place on eco-fiction lists. There are environmental worries and anxieties because living has become a real challenge. We should be more eco-friendly with our planet. The earth is an eco-system, and according to man's activities, actions and cares, there will be reactions. But there is a question. Will man continue to ignore the warnings and dangers of the environment and destroy the sources of life? The writer predicts events that turn into reality and comments on important issues in society; this dark dystopian side can be seen through his views and concepts such as the development of nuclear, atomic bombs and the travel to space. In 1972 *The Sheep Look Up*, Brunner with his wide imagination and his pessimistic view predicted environmental catastrophes and high pollution rate. He warns and gives instructions to man about risks that accompanied the development of technology. In addition, there are concerns about the threat of overpopulation and its

consequence causing environmental pollution. In 1968 *Stand on Zanzibar*, he described the life in Zanzibar accurately; overpopulation, racism and violence. He depicts overpopulation as the future ghost and gives advice to avoid serious disasters. In 1969 *The Jagged Orbit*, racism, oppression and extremism were rampant. Violence and killing are also prevalent. The writer conveys his concepts, ideas or message and warns humanity not to make mistakes. As we see, science fiction and ecofiction literary works represent a mixture of fact and fantasy. The writer depicts his visions of the future warning people against the development of negative trends and the potential risks that threat man and nature. Although all disasters, there are mounting global crises because of man's greed and ambition; climate change has continued. So many species of plants, animals, etc. are in danger of extinction. And we face increased food insecurity, acidification of the seas and oceans and continued warming.

Introduction

Pollution is a dangerous ghost that threatens both human beings and the earth. It is undesirable for people, but most people don't care. There are many forms of pollution: air pollution, water pollution, food pollution and soil pollution. All these sorts of pollution are serious issues; they have caused disastrous effects and contagious diseases as well. In fact, everything that surrounds us is directly or indirectly connected with the environment. Not only do the human beings cause pollution and damage, but also other living beings, in addition, nature (fires, volcanoes and earthquakes) have an impact on environmental pollution. What happens, greed and ambition come before environmental awareness. Additionally, we have greed, ambition and desire for a progressive but on the other side unchanging nature. Furthermore, some people become victims because of their profits, greed and selfishness, so they destroy the earth quickly.

Historically, man has struggled to survive in spite of all the complicated challenges and natural phenomena because life is a precious gift. So we can stop pollution by increasing the ecological awareness and reducing all sources of pollution. The developing countries and the Third World suffer from pollution of water, air, soil and food destroying human health and causing many problems and contagious diseases. The environment belongs to everyone and all beings, and it is not permissible to violate. Some people try to preserve the environment and call for that, on the other hand, the others destroy without interest in other people. Indeed, individual and collective responsibility, for preserving the environment and its components, is demanded. Man should not be selfish or greedy, and he/she does not live alone on the planet. Man has other partners, including humans, animals, plants, birds and marine animals as well. Therefore, it is necessary to have individual and collective responsibility for preserving and protecting the ecosystem.

It is important to know that environmental pollution is one of the most serious and complicated problems, mankind comes faces to face today. It threatens our life, animals, seas, oceans, drinking water and plants as well. It has harmful effects on our beautiful and precious planet. It makes air hazy and smelly, and it is the main cause of global warming, so we face a very dangerous phenomenon "Global Warming".

Man

always pours millions of tons of gases and smoke into the atmosphere carelessly. Waste, in all its forms, can pose a serious threat to human beings and the ecology. Scientists are sure that global warming and its dangerous impact lie behind the climate changes in the world. Temperature is changeable; floods in some parts of the world and drought in others. Man can stop global warming by doing many things such as economizing on burning oil and coal, using alternative energy, recycling used materials and preserving forests and nature elements as all.

Brunner is a creative and talented author, and he has future predictions about the environmental disasters. His novels are very popular and widely respected. But his view is dark and pessimistic. At the beginning of his writing career, he wrote conventional space opera pulp science fiction. He has notable works of dystopian literature which depict negative and pessimistic views. A dystopia is an unpleasant society where everything is bad and miserable. *The Sheep Look Up* (1972) depicts the ecological catastrophes in America where the author has future predictions. The destruction of the rain forests is an ecological disaster. The environmental consequences of nuclear or biological war are incalculable. The world was warned of the ecological catastrophe to come.

Brunner's *Stand on Zanzibar* 1968 exploits the fragmented organizational style John Dos Passos invented for his USA trilogy but updates it to build a three-dimensional fictional society of the future. Brunner always emphasizes a critical issue and illustrates its impact on humans and the planet as well. In addition, he wrote many novels to point out dangerous damages and how pollution is disastrous. Pollution, overpopulation, racism and their problems are serious concerns around the world. Various human activities lead to atmospheric degradation and the planet combined. Water pollution reduces the amount of freshwater that is available for drinking, swimming and fishing; this is dangerous and horrible. Some poisonous gases dissolve in water or in the atmosphere and then fall on the earth as acid rain which damages plants, trees and can kill fish in lakes, seas, rivers and oceans. Soil pollution is caused by toxic or solid wastes, sewage systems, pesticides and radiation.

Another form of pollution, fire in the forests and the released smoke or smoggy air that is harmful for both humans and the environment.

Since ancient ages, the Greek philosopher Plato wrote in his laws the principle of fining for the one who causes pollution. And also in Britain, the first law was issued to reduce smoke emissions and waste disposal in 1273 because the environmental impact is disastrous and damaging. By comparison, the developing countries and the Third World suffer from pollution of water, air, soil and food, destroying human health and causing many problems, disasters and contagious diseases, with developed ones.

The US military is the largest polluter on the earth; it is responsible for more than ten percent of worldwide air pollution. People who live near military bases suffer from many diseases. So we note diseases spread easily, quickly and everywhere. For example, we can find the emissions and smog from dirty coal-fired power plants and factories are a major reason for asthma, heart disease, lung cancer, etc. The seas, rivers, lands, plants and forests are polluted because of the acid rain and mercury poisoning.

Overpopulation is a dangerous and undesirable condition where the population exceeds the carrying capacity of the planet. The consumption increases day after day, and it may be a reason for famine or a risk of starvation. It causes the depletion of natural resources, so the impact will affect the whole ecosystem. Indeed, poverty, a lack of educational resources and awareness are reasons for overpopulation. So it demands more food, water, education, health care, transportation and housing, leading to widespread ecological issues in addition to pollution and its impact. Currently and not surprisingly, the world has exploded because of overpopulation.

The Jagged Orbit is a science fiction novel and similar to *Stand on Zanzibar* in its miserable views. The novel shows the conflicts and big gaps in the United States' races when interracial tensions passed the breaking point. African Americans or black Americans are an ethnic group of Americans (citizens or residents of the United States) with ancestry from any of the black racial groups of Africa. Those individuals who are descended from enslaved Africans. These Africans were brought from many African countries as slaves to work and serve others without any rights.

Other Africans were taken to English colonies in North America. According to these bad situations and miserable circumstances, wars occurred in America due to slavery, racism, and oppression. At that time, the Civil Rights Movement sought for political and social

freedom, their stolen rights and the elimination of racial segregation. More clearly, we note the oppression and inequity in consumption of goods, education, health care and services, and how the racial-ethnic differences in air pollution exposure even though the minorities participate in ecology pollution a little, compared with whites but they are more affected. Communities and neighbourhoods are, near polluted facilities, always suffer from diseases. Communities that live below the poverty line and black communities have a higher burden of pollution and its impact causing premature death, asthma, heart attacks and other diseases. So Brunner endorses and believes in teamwork to avoid the terrible future catastrophes.

CHAPTER I

1. POLLUTION IN *THE SHEEP LOOK UP*

1.1. Impact of Pollution

Pollution is one of the greatest challenges in our present time. It threatens the continuing of human communities, and also it endangers the stability of the earth and the ecosystems. In this world, many countries such as China, America, Brazil, Britain, Russia and many corporations produce millions of tons of hazardous and toxic chemicals and many harmful things which don't decay and non-biodegradable waste such as plastics, oil and glass causing high pollution ratings. Further, some governments, companies or individuals ship dangerous wastes such as chemical, biological or nuclear materials from place to another not interested in people, seas, plants, water, animals, air and food. Urbanization, industrialization, economic development and overpopulation have led to increase in energy consumption and more waste. So year after year, we note environmental pollution increases with different serious problems. As a result of that, pollution increases with the major kinds of pollution such as air pollution, food pollution, water pollution and land pollution.

Indeed, modern societies are concerned about the types of pollutants, such as waste, plastic, heating, transportation, refineries, manufacturing, noise and others. Pollution has negative effects on the environment and human health as well. So we should take serious responsibility and active measures, take care of the environment and propose changes in public or industry policies that would lessen impact on the planet and protect the air we breathe, reducing contamination of water and foods. As a result, some scientists try to create or develop some of the possible future paths on the earth to avoid disasters. Many people can't imagine how dangerous pollution is. Humans have been the primary cause of climate change and global warming since 1950. Humans have many ways to mitigate smoke and greenhouse gas emissions and avoid the serious consequences of global warming and other disasters.

At the end of World War II, Americans dropped two atom bombs on Japan, killing hundreds of thousands and causing a humanitarian and environmental catastrophe. Despite the positives of technological and industrial progress to improve

human lives, some people have used it to kill others, destroy and pollute the environment. So our world faces its inevitable end. Because of the importance of the environment and the methods to avoid dangers, the environmental disasters appeared in the literature in the 1960s as in John Brunner's works. Many countries of the world, especially America has started manufacturing and developing biological and nuclear weapons and spreading environmental pollution. Moreover, the manufacture of dangerous weapons and atomic bombs has also become a primary means of this work. Ultimately, we destroy ourselves, our future, and our environment with our hands, and also we see the rise of catastrophic and destructive environmental problems. Some companies and individuals ship dangerous wastes such as nuclear, chemical, biological, etc. to other countries especially from developed countries to developing ones. They have no problem to destroy both the environment and humans. This work itself is abnormal, disastrous and destructive. So we see that *The Sheep Look Up* provides us with different features of ecology and various disasters.

During the 1960s we saw the rise of ecological disasters in literature, beginning with such works as John Brunner's *The Sheep Look Up* (1972). More recently, as we shall see, the definition of "apocalypse" has been extended to include the conceptual apocalypse-the end of the world as we know it-and what we might describe as the postmodern apocalypse, in which the nature of the end. (Jean-François Leroux , 2004: 37)

Brunner's prodigious talents, in the three novels, express a fully political philosophy and represent polyphonic, and also they discuss the crises and challenges of the near future. The present world confronts ecological disasters, so our planet is in danger. The three novels aim to explore the causes of pollution and environmental problems. Developing countries are related to the developed ones in various fields, directly or indirectly, which leads to the plundering of the developing countries' goods and keeping them backward and poor. So developing countries and poor communities are victims, and they bear the brunt of environmental risks because of others' domination, advanced technology and broad ambitions to achieve aggressive plans. On the other hand, a good example for both pollution and racism, where evil deeds

were practiced, on blacks, by whites, in the US and specifically North Carolina, where an African American community was selected to be the site of a hazardous-waste landfill. After that, African Americans demonstrated against this silly behavior and called it a new term environmental racism. After that, they founded the environmental justice movement. No doubt, all individuals white or blacks have the right to live in a clean and safe environment. More importantly, these novels represent the most vivid examples of a near-future of the US and stark novels of environmental disasters as well. Brunner's novels are a kind of a realism of the future. As we see, the impact of human activities on nature is an unexpected evolution of science and technology, and it has increased continuously day after day. Brunner is a realist author and his social situations evaluate society. We know that modern technology has served man and provided benefits, facilities and improvements. But most often we see disasters; they do not result from the invention itself but from the misuse that leads to disasters for humankind and the environment.

Brunner chooses to construct the worlds of SZ, JO, and SLU so that their "subject matter" can be said to be the relations between the overdeveloped, developing, and underdeveloped nations, or the ever-increasing technical administration of nature and human nature, or even the fate of mankind as a species. (Stern , 1976: 117)

Brunner has an attractive and wide imagination. He makes the readers live the novel's atmosphere in different ways and also writes about the horrible nightmares and monsters that wait for us. He bitterly criticized the capitalist countries and their exploitation of the natural resources and people to achieve their greed and their future ambitions. For example, a capitalist country like the US plunders nature resources of other countries to build its empire, and it considers the others as experiment fields. In this case, how illiteracy and pollution don't spread. And how we expect these countries will be in the future. Here, the novel illustrates a laboratory for moral imagination and future predictions. Man is considered a big environmental destructor; to use chemicals, nuclear radiation and so on carelessly, and to cut plants and kill animal species, furthermore, there is no careful ecological management to recycle waste and rubbish.

Additionally, man exploits nature resources destroying some forests by cutting trees, which leads to catastrophic repercussions in the ecosystem and an imbalance in the environment, leaving disasters of pollution. This dangerous work, pollution spreads more and man becomes a major player in spreading pollution to satisfy desires and greed. Man tries to establish human settlements and colonies on a strange planet. Brunner calls for sanity in our actions and behaviors on the planet we live. Egotistical insanity prevents logical thinking and ultimately leads to the destruction of the planet. Every time we hear the toxic discourses in the US on the internet, news, emerging virtual reality technology, social media and so on deceiving the naïve people, although some are naïve to believe what they say. In other words, the official propaganda is the opposite of the reality and the truth.

John Brunner's extraordinary *The Sheep Look Up*. The latter is as pure a piece of extrapolation as one could imagine, and it deals with the pressing problems of the immediate future as powerfully as only fiction can. In its criticism of capitalistic exploitation of man and nature ... Brunner allows us finally to contemplate the destruction of his fictional America with a disturbing combination of horror and satisfaction. And above all he inspires us to work, to change our future, to avoid this nightmare he has painted for us in such vividly harrowing detail. (Scholes 1974, p. 214)

Although the disasters and the consequences of disastrous misuses of the biosphere, man's destructive activities continue largely ignoring the ominous warnings -intentionally or unintentionally- of scientists and futurists. So we wait for the miserable and gloomy future, not the bright one. In our world, there are many governments, individuals, corporations, big businesses, establishments and zealots that pretend to protect the universe and call for the bright future and modern civilization far away from disasters and the miserable future. In fact, they plunder and destroy our planet and its resources. We should not believe them because they say without act or work. The unrestricted development might bring disastrous consequences to society and the ecosystem and cause imbalance. We shouldn't forget that the policy of ignorance of both the environment and humanity is wrong and suicidal. This evil and

deceived behavior is unbelievable, eventually, the universe can't resist these crazed barbarian hordes, and we certainly note civilization deteriorates fast. If the US doesn't take the environmental crisis seriously, it will confront an entire collapse. Moreover, it doesn't want to be in the boat ethics, on the contrary, it earns a bad reputation. In the course of time, pollution, diseases, and malnutrition are spread everywhere, and there is not any ray of optimism or hope because all the doors are closed.

It focuses on the USA and the inevitable results of a continued ignoring of ecological imperatives... Brunner's dire predictions resemble the forecasts of the Club of Rome and the recent discussions of Life boat ethics. In Brunner's account of twelve months in the final collapse of a USA ravaged by pollution, malnutrition, and disease, there is no place for resistance or hope. (Fitting , 1979: 68)

Nature is rich in resources and generous in giving which supports human life, but we feel pessimistic and frustrated about the world's problems because of man's apathetic activities and the environmental crises. We must preserve nature and its components; it gives us clean rain and oxygen and so many good things, on the contrary, man gives smoke, smoggy air, polluted and toxic fumes and so many bad things. Irresponsible actions or activities of Americans destroy the ecosystem instead of renewing. They don't give nature any chance to do a self-renewing cycle. They commit big mistakes because of their bad behaviors and deprive coming generations from a clean environment. They want people to live in a swamp full of disasters and diseases. This planet has so many treasures and great mysteries, and it is full of beauty and wonder. So we need it every time to continue our life; we must overcome the destructive tendencies for the continuation and sustainability of humanity and the environment in order to maintain the balance of the ecosystem. Our planet is not stingy; gifts and kindness flow and every man receives. However, some people treat nature with cruelty and unfairness. In this respect, man's activities and behaviors are the former to build the boundaries with nature that originally must be erased. This planet is generous with the whole of humanity and inhumanity without differentiation between a good man and a bad man. Moreover, it has never known decay or stinginess, everything is reconstructed and reconstituted.

Optimism of any kind is in short supply in SLU, along with most of the other

resources which support human life, from sunshine and oxygen ... it rains battery acid instead of hail; the first-born of America aren't killed outright, but are born more stupid and more deformed in every generation. ...the ecosystem turns into a self-destructing rather than self-renewing cycle. (Stern , 1976: 125-127)

More than forty years ago, the brilliant author, Brunner wrote these frightening novels to avoid the horrible future. And he has claimed the occurrences of disasters in the near future. So he has constant warnings to save the earth and its inhabitants from pollution and its impact, and he goes further by providing objective and realistic lessons to the bastards and ignorant people who wreck the planet for their benefits and profits. He confirms how environmental, nutritional, health and social protection is important. *The Sheep Look Up* is a shrill warning to a world starting to spin out of control to act to protect its environment and its people. Because of man activities and ambitions, problems and crises are underway all around. In the apocalyptic perspective, our future waits for a mass destruction, but we can mitigate the effects of it or avoid an alternative future. Now, we see what he has pointed out and warned about environmental disasters. "Brunner is certainly best remembered today for the dire jeremiads offered in *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972), stark novels of ecological disaster that have only gained urgency since their publication over forty years ago." (Smith , 2014: 380).

Many authors and critics acknowledge the predictions of Brunner's novels and the existence of the disasters. Brunner has a predictive view of Western politics and modern technology. As they play a major role in the environmental pollution and the destruction as well. Brunner warned against the greed of Western countries, which leads to water pollution, air pollution, and food pollution, and ultimately man is a victim of irresponsible activities. In this respect, some imperial and powerful countries such as western countries seek to expand their control and hegemony over weak and developing countries and the resources of the earth, following strange methods and ways. They try to impose a specific economic, environmental and social policy. Of course, this policy is unfair and unethical. Their goal is to control nature resources, raw materials, markets and products. For example, a strong and imperialist

country like America, tries to control the entire world. Eventually, it leads itself and the whole

world together to the environmental apocalypse. "Several critics have commented on the warnings sounded in Brunner's major novels about the imperialist underpinnings of Western politics and technology, and others have drawn attention to Brunner's conjuring of environmental apocalypse in *The Sheep Look Up* (1972)." (Buleavich , 2002: 53).

Brunner has a distinguishable and keen awareness about the future events. He disputes the environment issue many times and carefully because of the importance of this subject. In a strange omen of later pollution scares, *The Sheep Look Up* is not a story of terror or to intimidate readers. It is a novel that describes many indifferent individuals exposing humanity and nature to inevitable disasters. We are exposed to environmental, political, economic, social and health breakdown. Some people behave selfishly and carelessly looking for profits to achieve their ambitions, but they destroy the environment and humans. The big problem is the disasters encompass the weak and colonized people before the others. "*Sheep* is energy-sapping, depressing, and apathy-making." (R.D.M. , 1974: 307).

Undoubtedly, science fiction depends on certain concepts to construct the near future or the far future. And also imagination plays a powerful role to stimulate political activities to avoid complex problems or the environmental disasters in the future. Brunner's views and predictions are shrewd and complex, where there are actual nightmares and disasters waiting for us. He tries to present an alternate version giving us many instructions and warnings. We know that the planet state is worrisome because of the illegal and immoral activities of many countries or corporations. For example, we see climate change, high temperatures, floods in places and droughts in other places, food shortages, disease outbreaks and forest fires. Brunner emphasizes the importance of the environment and its preservation because it represents our existence. "*The Sheep Look Up* providing an alternate version in terms of ecology." (Mack Reynolds , 1974: 274).

Brunner's novels are a dystopian-disaster fiction, where we wait for a miserable future. Our world is full of pollution, overpopulation and racism. He gave

a shrill warning not in the past, but it has remained until now. More clearly, they are past warnings about the coming future. If we are in the wrong way, we will certainly face disastrous consequences. He emphasizes the environmental limits and not to exceed reasonable limits because the planet has a limited load capacity. So he suggests controlling pollution and controlling overpopulation to reduce danger. The world system faces global ecological crisis including community and nature, so we have to reduce/decrease waste and pollution and extend/increase awareness. "John Brunner's *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972), for example, depict a future of insuperable pollution and overpopulation." (Rosenthal , 1985: 152).

1.1.1. Air Pollution

Air pollution problem represents a crucial issue, so we can't ignore it. Air pollution comes from natural and human-made sources, but human-made pollutants are more and more important in air pollution. Clearly, factories, transportation, power plants, oil refineries and the continuing of cutting trees and plants play a major role in the high rate of carbon dioxide. So we decrease oxygen and should use oxygen cylinders to breathe fresh air due to the polluted atmosphere. Indeed, we consume more oxygen than we produce, so we need to buy some oxygen and use a filter mask because the air is polluted. Nature and its components belong to all creatures, so we should protect and preserve them to live safely without problems or diseases. We live in a modern industrial age, the emissions of gases and smoke leads to global warming which affects the ecosystem in many ways. And environmental toxicity spreads largely and damages the ecosystem, furthermore, it invades every dimension of our existence. Our planet is rich in oxygen and its clean atmosphere, but human pollution; waste, smoke, etc. of the earth and the atmosphere makes the planet uninhabitable or a dangerous place to live. Man plays an important role in preserving the biosphere, but sometimes some people spoil and destroy this blue planet. For example, the increase of carbon dioxide, deforestation and smoke from transportation, factories, nuclear plants, etc. and the dumping of wastes in the hydrosphere; these factors threaten the biosphere reserves all over the world, as well as the entire biosphere; humans and non-humans. Therefore, we must preserve the

reserves and double their number due to their great benefits for humans and the environment. Day after day, the air becomes more polluted and becomes denser with smoke. Emissions have formed a harmful smoggy atmosphere to humans and the environment instead of the clean atmosphere; this is up. But down, transportation increases and fills everywhere. Thus, smoke emissions increase more and more. Furthermore, we have replaced grass with asphalt, cut down trees instead of planting and reduced gardens instead of expanding. We nearly filled the seas, rivers and oceans with waste and plastic because our waste increases day after day without recycling.

In discussing the use of oxygen dispensers in *The Sheep Look Up* (1972), Slocum is interested in exploring the conditions that would call for such devices. As Slocum does point out, Brunner supplies us with his reason: We produce less than sixty per cent of the amount [of oxygen] we consume ... Since they are not needed to rectify a general oxygen shortage, perhaps the public oxygen dispensers in TSLU are needed for temporary relief from elevated carbon monoxide levels in cities. (Goldman, *The Polymorphic Worlds of John Brunner: How Do They Happen?* 1976: 104)

In this fiction, the issue of responsibility, the advancement of society, and cooperation among people; all these factors play an important role to reduce pollution and its impact. As we cannot drink clean water or breathe fresh air without a filter or a filter mask. We note political, economic, military, and ethnic exploitation by the United States of the Third World. Ecological pollution has become a subject of great and public interest, and the future seems miserable with few resources which support human life. Moreover, the world undergoes rapid environmental change because of human population growth and economic development. This change encompasses cutting rainforests, the shallow lakes and seas, acid rain, industrial activity and global warming as a significant shift. In response, many public policies have been proposed to control pollution and to improve the quality of man's environment. The active economic movement and industrial development have a major impact on global economic activity, where factories, refineries, etc. product harmful waste for health and the environment and cause many diseases. Some corporations use the earth as a store for harmful waste, which in turn increases air pollution and soil pollution. Therefore, air pollution and environment pollution

increases by increasing economic activity. Eventually, because of the importance of this matter, many leaders of the world have talked many times. For instance, Obama pointed out the danger of the situation and all the world must take strict and necessary measures to avoid environmental disasters in the future. "As the newly elected Obama signaled in his

speeches, something more structural needed to change: ..., and climate change legislation to stem the worst effects of the environmental damage that worldwide economic activity is producing." (Song , 2010: 422).

Apathy, malfeasance and irresponsibility, these accumulations will lead to a failed political and economic system and eventually collapse. Inevitably, environmental degradation will occur. Thus, Brunner depends on a complicated variety of reasons and their interactions such as air pollution, water pollution, diseases, biological invasions, pesticides, famine, unrest, and impact of climate change. There are violations and abuses practiced against the planet, intentionally or unintentionally causing problems, disasters and an imbalance in the ecosystem. However, there are some people who have optimistic and pragmatic theories and ideas. These scholars and futurists seek to solve the ecological problems through the appropriate use of innovative environmental technologies, away from random and unconsidered practices. They ask all humans: governments, individuals, big businesses and corporations to follow the conscientious uses and the instructions of the environment. Undoubtedly, crises, problems, calamities, and destruction in all their forms are everywhere, and the damages and effects await us and chase us; they are like a ghost or a nightmare. Moreover, the situation gets worse day after day. In fact, we can avoid or mitigate severe consequences, at least by taking practical measures, because the future is polluted and full of obstacles and crises. The situation is incredible and intolerable. Therefore, a rational person looks for an alternative future.

In the apocalyptic perspective, utter destruction lies ahead but can be averted and replaced by an alternative future society; in the risk perspective, crises are already underway all around, and while their consequences can be mitigated, a future without their impact has become impossible to envision. (Song , 2010: 426)

It seems that man is penned in a hostile world, running beyond greed and benefit to continue. As a result, the world has become polluted, and human beings are victims of this pollution and the biggest loser. The future isn't clear and foggy. At the end, this is stupidity and apathy. By the time and in the near future, the earth might become uninhabitable for humans where heat and global warming, food scarcity, plagues,

diseases, air and water pollution, economic collapse and poisonous oceans. Not to mention nuclear and atomic radiation contamination and its harmful effects on humans, animals, plants, soil, water and the environment combined to make matters worse. The nuclear age means the bleak and dark future which is full of crises and disasters. Ultimately, most of humanity seeks for peace, stability, development, and prosperity. And also it likes to live in a clean and bright future not polluted where there is no place for wars, suffering, poverty or diseases. "For society to eliminate war, poverty, disease, and suffering. The future, a bit cloudy, was still bright: man was entering the Atomic Age." (Brunner, *THE ATOM BOMB IS TWENTY — FIVE THIS YEAR*, 1977: 10).

Brunner believes the end of the world has begun since the Cold War. He works by logical extrapolation and not by random guess work. He predicts crises and disasters before they take place. Thus, he gives future images and warnings to avoid serious consequences. The race and rivalry have continued between pioneers or great countries such as America and the Soviet Union, Russia now in all fields; political, military, economic and industrial, and it is increasing. But they are apparently unconcerned about the lives of those around them, human and non-human. They pollute, destroy, spread diseases, expand their control and empires, and take advantage of natural resources. Therefore, there is a high price for these irrational and reckless actions and activities. "John Brunner in *The Sheep Look Up* (1972) found increasing use as we moved toward a post-Cold." (Gannon, 1999: 153).

There are apocalyptic visions of the misuses of modern technology because it leads to mass destruction as happened in Japan 1945. Although there are apocalyptic warnings about our destruction of the environment, many people insist on their activities that increase disasters. It is necessary to understand the system

behavior under changing social, political, economic, and ecological states to keep on stable equilibrium states in the ecosystem. Human responsibility demands to reduce gas emission because of rates of climate change and global warming. "One first notices a converging structure-converging precisely toward the end of the world (*The Sheep Look Up*).\" (Gérard Klein , 1977: 11).

The ecological components react with human activities and a large variety of environmental practices and give negative responses when the actions of human beings misuse nature. There are deep roots and mutual relationships such as coexisting, respect, environmental issues and values between human beings and nature. So nature is no longer outside us; we should develop and get better at relationships, or the consequences will be catastrophic. The competitive polarities cause ecological catastrophes for victims: nature and man. In this respect, industry plays an essential role in economic growth and improving the human condition and life. On the other hand, it causes damage to both the environment and the human beings. For example, gases, smoke and emissions released from power plants and factories pollute the air largely. In addition, there are damages that affect water, land, soil and groundwater. The industrial establishment seeks to profit more without regard to the surrounding environment or people. Here, there is a very important matter. The activities of the military industries, experiments, remnants of military bases, laboratories, nuclear experiments, and remnants of war leave catastrophic consequences for the environment, people and animals. Further, it has devastating effects that are passed down through generations such as deformed births, mental disabilities, numerous diseases, cancer and infectious diseases. Apparently, we must admit that we live in a critical condition. "In novels such as *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972), depicts a series of bleak near-futures run by the military-industrial complex or strained by over-population, pollution, or computer viruses.\" (Stillman , 2001: 366).

Air is one of the most important environmental elements for the continuation of life. Unfortunately, this precious element is not evaluated or respected by man, so the largest contributor to pollute air and atmosphere is man. In America. There are many huge companies, and others use fossil fuels, oil and coal to generate energy,

factories, furnaces, and transportation. Thus, the release of various gases and smoke into the atmosphere at high rates leads to air pollution. Additionally, because of destroying nature resources and cutting plants, trees and forests, we consume more oxygen than we produce. So we need to buy some oxygen and use devices because the air is polluted. Industrial cities are not interested in surroundings. In the US 100,000 deaths per year because of air pollution more than car accidents and murders, in fact, it is

horrific and shocking. "The wind, with its precious oxygen, no longer is sucked in by the United States. It blows the other way. *The Sheep Look Up* is concerned not with how a vacuum begins but how it ends, and, as in all of Brunner's novels, it ends through the actions of human beings." (Goldman, *The Polymorphic Worlds of John Brunner: How Do They Happen?* , 1976: 111).

Brunner's novels feature strange language including social issues and disasters about the future. He has goals of writing these novels to enlighten and educate people to avoid future terrible disasters. He believes that his novels will be useful to save the planet and its inhabitants. Furthermore, he suggests suitably solves problems and encourages teamwork and collective work to solve the pollution's problems. He always criticizes America's self-depredation through environmental suicide. America's activities make the ecosystem turn into a self-destructing rather than self-renewing cycle. Eventually, there is a balanced cycle and man must respect and preserve the ecosystem in order not to face future crises. "His major achievement was an ambitious series of dystopian novels that focused on social and environmental issues, including *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972)." (Sawyer , 2001: 333).

According to Brunner's future predictions, ecological catastrophes will happen because of biological, chemical and nuclear uses. The smoggy and polluted air has disastrous consequences; factories, power plants, refineries, the open burning of wastes, rubbish and plastic and burning coal, where these factors are big sources of air pollution. So harmful air quality can kill many humans and organisms. It causes many physical and psychological health problems and diseases spread more widely such as asthma, heart attack, pneumonia, lung cancer and respiratory

diseases. As a result of that, the death rate increases. Despite all these dangers, the largest polluter on the earth is the US military which isn't interested in others. The hydrosphere, the biosphere and the ecosystem are dependent on interaction with each other and with otherness. However, human interaction with nature is different; it depends on more pollution, more depletion, more smoke and emissions, more thrown waste and more destruction. Further, a small group of colonists try to occupy and colonize this pure planet. It refuses to accept earth laws and its limits or rules. It follows a dangerous

strategy of colonial imposition and extends the boundaries of human identity to control the planet. In the US, the author illustrates how the atmosphere of America is polluted causing many diseases and health problems. Additionally, emissions and smog chokes people and cities, the acid rain as battery acid kills plants and children under fifteen are warned not to eat fish because of mercury poisoning in lakes, rivers and seas caused by pollution. These examples represent serious disasters. But, out of America, the US military contributes to pollute the environment and inhabitants together, and it causes many diseases: military bases, the burning of unexploded ordnances, practical exercises using ordnances, laboratories, experiments, and military remnants. Thus, many scientists and futurists are worried about the future.

The biggest growth in asthma cases has been in children under five, with almost 4 million having an asthma attack in the last year. Americans over seventy are dying at twice the rate they did just twenty years ago. Studies show that emissions from the nation's aging dirty coal-fired power plants and factories are a major cause of asthma, heart disease, lung cancer, and premature deaths. They also cause much of the smog that chokes our cities and the acid rain that kills our forests. In forty one states, children under fifteen and women of childbearing age are now warned not to eat fish because of mercury poisoning in our lakes and rivers caused by this pollution. The largest polluter on the planet, the US military, is responsible for up to ten percent of worldwide air pollution. People living on and near military bases have become concerned for their health and safety, especially during the

burning of unexploded ordnances. (Brunner, *The Sheep Look Up* , 1972: 573).

As we see that air pollution is a very important issue, and the whole must take the problem seriously and behave/act reasonably not selfishly.

1.1.2. Food Pollution and Water Pollution

The Sheep Look Up represents the degeneration of the world due to pollution especially the US, but affects all over the world. Additionally, it represents the darkest and pessimistic among other novels. Many governments, individuals and money-hungry corporations ignore the ecological problems. Certainly, we face the inevitable disasters. The world suffers from a serious environmental crisis that cannot be ignored. Pollution is almost everywhere, specifically the United States. It lives under a toxic smoke umbrella, and smoke is increasingly

in major cities more than the countryside, where factories, power plants, transportation, chimneys, stoves, furnaces and restaurants, etc. Within these conditions, people live in a polluted atmosphere. They breathe dirty polluted air, so it is necessary to use masks to avoid foul polluted air. As for food and water, they are crucial issues and very important elements in life. Around the world, every day, about 14,000 deaths because of water pollution. Although the water is not clean, many people drink it from faucets because they are unable to purchase bottled water. Also, food must stay healthy, is not only questionable but is contaminated including fish and honey. Ultimately, these materials lead to many diseases and are sometimes contagious. As a result of this polluted society, the infant mortality rate is increasing. Moreover, there is an important issue, chemicals and pesticides play a dangerous role and also contribute to the destruction of the body's immune system. Ultimately, the world, especially America, faces serious catastrophes, so we need workable and effective strategies or procedures for controlling the situation to avoid a bleak future.

The Sheep Look Up (1972). Set in the United States as it enters its "third century" as a nation, the novel begins with the ecology movement in shambles and the world oozing with pollution. The inhabitants in large cities wear masks to avoid breathing the foul air that covers everything in sooty slime. Those unable to afford expensive water filters or bottled water contract illnesses at their taps. The tainted food supply results in widespread outbreaks of gastroenteritis. (J. Smith , 2012: 79)

Brunner was surrounded by a wide ecology of ideas, predictions, warnings and values. So he wrote many powerful science fiction novels talking about the bleak future and warning of dangerous disasters. Additionally, his novels are famous and realistic; they talk about the past, criticize the present and warn of the future. In this respect, there is a class of indifferent wealthy people who live luxury lives refusing to recognize their real and bad practices in consumption resources and threatening their lifestyles. We should cooperate and create a clean future instead of polluting humanity and nature because we stand at the edge of an ecological cliff. Some humans destroy the earth to fulfil their evil and destructive desires. For example, they conduct nuclear and other experiments which lead to climate changes and the melting of icebergs. In addition the excessive use of pesticides and chemicals which leads to destruction of plants, soil and subsequent famine. In fact, there are real concerns and scary scientific

predictions about the future. If we do not suggest solutions and implement them, we will move from a bad situation to an apocalyptic one, ultimately, we will be in an uncontrollable environment. To pollute water, air, plants, animals or soil means to introduce materials that harm the health causing serious diseases. Thrown wastes into seas, lakes or rivers harm not only people who drink water or swim but also the fish and other animals. Furthermore, man, birds or animals which eat the fish and seafood will certainly get diseases.

John Brunner's *The Sheep Look Up* (1972), a powerful science fiction novel, calls into question our over-use of pesticides, overeating of beef, and the devastating, long-term effects of air and water pollution on our planet. Relationships among many facets of daily living are explored throughout the book with a depressing message underlying the work. (McCutcheon , 1982: 20)

Brunner portrays the greed of many humans in order to gain more benefits and profits using chemical and toxic materials not interested in others. Despite this, they know that these chemicals threaten man's life and other lives; animals and plants. Some greedy use chemicals excessively to increase production, which leads to contamination of both the production which itself is polluted and causes many diseases. Secondly, the land where chemicals spoil the soil and kill the beneficial

bacteria. The polluted water and air and groundwater cause many diseases and contribute to destroying health. This will help keep contaminated water and food. We note that the greatest damage being done to our planet today is that being done by humans.

In *The Sheep Look Up* (1972), Brunner details the many minor ecological cataclysms-drug-resistant microorganisms, acid rain, food and water supplies contaminated with toxic chemicals, introduced pest species, and human-caused extinction-whose synergistic effects imperil life on earth. (Dommelen 1989: 730,731).

Here, Brunner comments on an important and sensitive issue; it represents man's health and life; it is "food". Because the polluted food threatens man and animals. Unethically and immorally opportunistic individuals and corporations behave incredibly; they provide people with synthetic and cheap foods which don't have natural taste and sometimes rotten and expired, so diseases such as cancer, inflammation and dengue or fever spread largely. There are many people who cheat, offering unreal and unhealthy food for a profit. They cheat people by introducing unhealthy and false dishes. They have no problem causing diseases to others to earn money in order to satisfy their desires and greed. Food and dishes look delicious but in fact, they are really harmful. These people have no problem to pollute humans, the environment, air and water, and gradually kill human beings. The rich are busy developing new food products such as Nutripon and selling purified air and water to those who can afford it. In Africa and Honduras, people have become crazed after eating a food-product called Nutripon, made in the United States. The insanity is traced to a substance somehow introduced into the product, perhaps intentionally. As international tensions rise, the environmental damage in the US rapidly increases.

And in John Brunner's *The Sheep Look Up* (1972), cassava is processed into Nutripon-nutritious food grown hydroponically-which is cream-colored, and of the consistency of stale Cheddar cheese. Although these dishes sound bland and utilitarian, elegance and creativity have not entirely vanished in future cuisine; for example, at the Galaxy Palace Restaurant of Somtow Sucharitkul's Mallworld, you can order "sweet-and-sour ice turtles with chocolate chips. (Gregory Benford 2018: 120)

1.1.3. Pollution and its Impact on Humans

Environmental pollution is a worrisome global problem that most countries in the world suffer from, as it has damage to human health, lives and other organisms as well. Additionally, it causes a disorder and unrest in the ecosystem. Therefore, humankind must use effective methods and follow the right guidance in using energy, transportation, factories, etc. that reduce damage and effects to air, water, and soil. So there must be strict laws to reduce pollution. Some countries, huge companies, and transcontinental corporations such as the American produce much more than they need to achieve more profits and advantages of the commodity trading business and causing disasters and diseases for people and the environment around them. So pollution is considered the epidemic of the globalization era. There is a bitter truth that madness reigns over the world. *The Sheep Look Up*, seen as a warning to a world starting to spin out of control of chaos and pollution to act and protect its ecology and citizens.

There are many dimensions of pollution such as the environmental, economic, social, health, and political. Therefore, it is supposed to be strict laws to reduce pollution and its disastrous impact on the environment in order to save our planet: Humans, air, plants, animals, water and food from the future disasters. In addition, how to use nature resources properly, improving human life in all fields, and not using chemicals excessively because of their catastrophic results and causing many diseases. There is a competition among countries and companies to achieve more profits. If we don't use the nature resources well, it will be seriously depleted because the earth has limited resources. So we must preserve these treasures and not waste them.

Law can often be used to reduce or even eliminate the harm from pollution by manipulating "exposure allocation," or how pollution is allocated across a target population. Opportunities for exposure allocation arise whenever the relationship between exposure to a pollutant and harm is nonlinear, as is the case for many pollutants. For these pollutants, exposure allocation presents the potential for reducing the harm from pollution even when it is not possible to reduce either the total amount of pollution emitted or the total amount of exposure. After identifying the conditions under which changing exposure

allocations can improve health and save lives, this Article identifies legal strategies for managing exposure allocation to minimize the harm caused by pollution. (Rowell 2012: 985)

Although the novel is terrifying, it is bright and attractive. Apparently, our mother the Earth asks us to stop our evil and hostile actions. In this place we suffocate it, in that place we destroy it, and in another place we kill it; these are man's behaviors. Our mother is generous and not stingy, it gives us everything. On the contrary, we give it bad things. All changes of environment, climate, diseases and deforestation, other disastrous consequences, etc. due to human activities. Man always searches for increasing and for modern knowledge because he/she lives in an industrial society or lives in a technology era as it were. Because of humans' greed, we see pollution everywhere, and the repercussions and implications are present. In this respect, factories, transportation, energy plants and refineries cause environmental pollution; it suffocates the US because of not having enough oxygen because of certain actions of certain people. Here we have a very important question, what is the guilt of others?

The Sheep Look Up is a shrill warning and a way to understand the world. In addition, residents in America wait for the dark future; they cannot see the sun where the atmosphere is polluted, which makes them use the filter masks. At the end, it is a critical issue and how man rapidly destroys the planet.

John Brunner's novel *The Sheep Look Up*, published in 1972, is a highly intelligent examination of one possible course of environmental collapse in the very near future... Stop, you're killing me! reflects that destruction of basic rights. It also reflects the fact that the degradation of our environment is the result of the specific actions of specific people. (Schrecker , 1977: 2)

In the course of the novel, pollution leads up to a global ecological and political catastrophe. There is a mutual relationship between man and the environment. As there are growing concerns about the horrific future because of its disasters due to pollution. All issues/matters of moral, social, economic, health, technological, political, and environmental changes are important for preserving the environment away from pollution and its impact, and also away from diseases and

economic woes for the continuation of human life. Human hearts should be filled with morals and brotherhood for all the world and free from greed and selfishness. Indeed, many scientists, authors and futurists are anxious about the future of humankind, the planet and modernity's excesses; they warn against abuse of technology and their disastrous effects. So pollution is a source of considerable anxiety, so we have to preserve our planet well because it represents our life. "All issues of technological and social change become clouded with the moral overtones of pollution anxiety and the doom watchers' prophecies of Armageddon. But some moral heart-searching is surely appropriate." (LEACH , 1973: 423).

Dystopian fiction offers a vision of the near or far future for communities that are in disastrous degradation; these societies are imperfect and even terrible. Brunner used dystopia as a literary technique to discuss reality and depict matters that might happen in the near or far future. Through the novel, he tries to educate and give awareness to his audience. Thus, the environment plays an important role in Brunner's depictions. Additionally, dystopian literature represents a critique of social conditions or political systems through the imaginative extension showing faults and

contradictions. The world turns to become a polluted environment because people cannot breathe the fresh air, further, the basic infections are rampant. Pollution kills people, but the opportunistic and exploitative governments or corporations cover up the effects of pollution using false speech and slogans. We often hear fake news from the internet, television and social media. A few people who can live healthily are the rich. Austin Train is the mastermind of Trainite operations (movements). The devastating weapons are devised by evil men; the environment and we are the victims of chemical and biological attacks, so this is the pollution itself and therefore weapons have a devastating effect on man and nature. Brunner portrays Austin and Dr. Byrne as heroes in the novel, where Dr. Byrne was an observer in the UN. Many people listened to Train and interpreted his words according to their own ways. Train was a bomb maker once and again activist.

Brunner does provide heroes who represent at least part of his viewpoint in *Sheep*. Austin Train and Dr Byrne, the Irish UN observer. Train plays the coyote role, following in the footsteps of Mulligan and Conroy, but with a

difference. Too many people have listened to Train and interpreted his ideas in their own ways. The Trainites exemplify one such interpretation. Ironically, a bomb-making Trainite, who believes he is following Train's ideals, blows up Train himself at the point when he is coming out of seclusion to again become an activist. (Murphy , 1987: 28)

Many countries and companies have their own assessment and balance, so they have no problem killing hundreds and thousands of people; people are like insects. And also to achieve their goals and to execute and perform their scheme. We live in a strange and bleak world where the climate is polluted, and many governments or some people control and are full of platitudes and outright lies; food and water are scarce. Additionally, you need filter masks to breathe inside and outside the cities and poverty is rampant. The story follows the lives of numbers of people, and how they survive in the world as it now stands. In addition to his fiction, Brunner uses a very strange literary style and wrote poetry and many unpaid articles in a variety of publications. He was an active member of the organization Campaign for Nuclear Disarmament and wrote the words to "The H-Bomb's Thunder." So, he supported nuclear disarmament

because they are lethal, fatal and deadly to the environment and human beings together. Thus, the advanced/modern technology is useful and beneficial but dangerous and harmful at the same time. This book offers a dramatic and prophetic look at the potential consequences of the escalating destruction of the earth. In this nightmare society, air pollution is so bad that gas masks are commonplace.

Infant mortality is up, and nearly everyone suffers from a disease. The government doesn't want anyone to object or protest; it uses the media as drugs to entertain people in order not to protest. Brunner doesn't trust technology because politicians use it in its negatives more than positives'. *The Sheep Look Up* is a skilful, frightening, political and social commentary, and it is one of the remarkable works of dystopian literature. A disastrous transition might happen if we do not act or behave well. The greedy and evil man causes catastrophes, wars, acts of terrorism, violence, and even he/she is ready to destroy nations or countries. *The Sheep Look Up* forecasts the environmental downfall of the world, specifically the US. Everyone is sick or poisoned. We can't swim anywhere because the environment is polluted.

Consequently, we cannot breathe without filter-masks. In many cities, you can't go safely outside without wearing an oxygen mask. Natural water sources are so polluted and unsafe to drink or swim. Children are deformed or developmentally disabled, and poor people feel helpless and resort to violence; corporations are in charge.

A man struggles for control and material benefits in order to achieve ambitious goals polluting air, water, seas, and oceans, unlike Mulligan who likes and helps people. And also he tries to protect them from other greedy people, criticizing those who destroy the environment looking for their own profits. Ultimately, people become victims because of other people's activities and their greed. Although what happens in the world, there are concerns facing some developed countries, whereas developing and poor countries bear the brunt of ecological risks. Brunner gives different types of characters warning against pollution and its dangers and demonstrates the responsibility of the human towards this dangerous situation. Further, everything is polluted: air, drinking water, food, seas and oceans, so we must share responsibility to avoid pollution and future disasters not to live in environmental and social isolation. Now, man is a victim of pollution caused by other people, so we have two options:

either to destroy ourselves and our lives or to follow the instructions of survival and a clean life away from pollution and diseases. We will, no doubt, face coming nightmares and real threats against human life and nature, so we must take the matter seriously.

Brunner presents the reader with a very human character who must choose between self-sacrifice and escape. Such a character is very much like Chad Mulligan in that his love of man and his horror of what man has done constantly struggle for dominance. Thus, like Mulligan, Austin Train tries to isolate himself from his responsibility. But, like Norman House, he must eventually make his choice. Train, unlike House, does not need to grow into his humanity. Instead, he must accept responsibility for it. The theme of responsibility, therefore, is central to *The Sheep Look Up*, and the dystopia presented in the novel is created to underscore this theme....there are warnings against swimming in the ocean, drinking the water, and breathing the air

without the aid of a filter mask. Man seems to be penned in by a world completely hostile to his continued existence. This world is thoroughly polluted, and, whatever the cause, man is now a victim of that pollution. (Goldman, *Heroic Man in Unheroic Society*, 1978: 266)

There is a group of stupid and greedy people as thieves who control people and society; those are far from rationality and logic, looking for their own profits and benefits, but they have no positive effects on society. They don't improve, develop or educate their human race or country. Characters are full of greed and stupidity, and they possess the power and influence but are not able to exercise any conscious and rational impact on society to move it to the best. Man has polluted all the universe. For instance, the agricultural inputs of chemicals and pesticides have been used largely. Not surprisingly, the ecological pollution, diseases and degradation are widespread. The evil humans change the ecosystem balance to survive or live well for a short time. After that, nature gets worse gradually. The rich and the powerful dominate the world and its resources. But one day, they lose control over events. What man would benefit if he/she won the whole world and ultimately lost himself/herself. So this novel is a warning against unexpected serious consequences. No doubt, there are coming disasters and many countries and corporations give nothing but denial and

complacency, so we must prevent it and must not contribute.

The Sheep Look Up is an excellent case in point. By the time the novel begins, the society of this world is suffering from an almost complete power vacuum. Even the characters who have the means for power are so riddled by greed and stupidity that they are incapable of any meaning control. The power centers in *The Sheep Look Up* cannot exert any conscious, rational influence on society. As a consequence there are no satanic, evil men in the novel. There is only a series of stupid, petty thieves. (Goldman, *The Polymorphic Worlds of John Brunner: How Do They Happen?* 1976: 110)

From a purely Marxist point of view, capitalist countries like America, chaotic and absurd systems characterized by periodic crises that cause economic, social, political and environmental disorders. Capitalist expansion threatens to destroy the nature resources and foundations of human life on the planet. There is a group of

huge companies, and giant cross-border monopolies control the global economy. Crazy corporations seek to achieve more profits and increase production, leading to serious catastrophes. Capitalists exploit workers and nature resources together. So the problem is not humanity but capitalism. The capitalist system is the cause of global pollution and environmental degradation, social exclusion, poverty and wars. The environmental and global problems that we face are caused by capitalist actions not by human activities or behaviors. Today, we have opportunities, solutions and scientific capabilities to save and protect humanity, the environment and nature resources. But the dominant capitalist system prevents these ideas and efforts, because they threaten its empire based on the depletion of humans and nature resources.

Many authors illustrate that the colonising forces have future plans and programs to control and swallow more areas and forests. They have overexploitation of nature resources. They follow dangerous ways and methods to build their empires; they deforest, pollute the atmosphere and food, throw waste into water, and destroy the earth's resources. Further, the struggle and competition among individuals, big businesses and corporations continue to achieve more profits and at the expense of miserable inhabitants and the proletariat. Additionally, irrationality and insanity are features of the colonists' activities and behaviors. Their colonial logic contrasts with

the ecosystem and the indigenous people; their world is intimately connected to their senses and spirits of place in the forest. Ultimately, many authors confirm that there are bad practices and exploitative treatment of nature and the indigenous people. Pollution, floods, fires, and climate changes represent deadly traps, so we must avoid them. The civil society and the political establishment should cooperate to provide a vision of hope for all humanity's future.

The Sheep Look Up is an organized and fictional novel which cares for others and suggests solutions for a clean future free from pollution and its impact. Brunner criticizes Western capitalist countries and America specifically because of exploiting humans, natural resources and the environment, seeking for special ambitions and desires. Brunner is not Marxist, but he takes some useful Marxist ideas for people

and society away from capitalism. America builds its empires on the bodies of millions of people and cities. It destroys countries, nations, civilizations, cultures, and traditions under false slogans. Therefore, capitalist America represents a future terrifying nightmare for peoples and nature together. This monster destroys itself and the environment.

The latter is as pure a piece of extrapolation as one could imagine, and it deals with the pressing problems of the immediate future as powerfully as only fiction can. In its criticism of capitalistic exploitation of man and nature it is as thoroughgoing as any work of literature could be. It is not Marxist in any programmatic way, but suggest an ecological assimilation of certain Marxian ideas. It is passionately concerned with change, however, and shows us how such a concern can function in a structured fictional context. By giving us a work of naturalism set in the near future, Brunner allows us finally to contemplate the destruction of his fictional America with a disturbing combination of horror and satisfaction. (Scholes 1974: 214)

In fact, the ethics of environmentalism should be rooted everywhere; in schools, in universities and in the mass media. In this respect, there is a natural contract and interdependence between man and nature. So nature is not a passive object, but it is an independent entity. We as humans should strengthen the relation that depends on respect and sharing, or we face dangerous disasters as water pollution, food pollution

and air pollution. Undoubtedly, *The Sheep Look Up* is a powerful science fiction novel and gives a depressing message about the future disasters. The environmental concerns have been growing with man's greed and unawareness and the mistreatment of the planet as well. So John Brunner speculates about the serious effects of global pollution in the near future. Brunner warns of excessive use of chemicals such as pesticides, insecticides and herbicides, which are harmful and pollute the air, water, food, soil and the environment. Additionally, he warns of overeating of beef because it may be polluted. Man lives within his short future to achieve more material profits as a result of his greed without seeing the future or the coming generations. Therefore, nature and the environment must be preserved in all its elements because it forms a coherent and integrated circle. Like these information and instructions

should be taught, as a main course, for students in all stages to avoid future disasters and damages. Many individuals and corporations treat the seas, oceans or rivers like trash cans. The most of marine waste is from land; plastic, cartoon, corpses, sewage, etc. All these factors pollute the marine environment and humankind together. For instance, fish and other animals eat toxic and polluted materials, so these pollutants have deadly effects on marine life and human health because man eats seafood. Eventually, these irresponsible acts, neglecting and pollutants destroy our health, our environment, our economy, and water system. Measures must be taken before more losses.

They could facilitate our deep understanding of curriculum matters and that understanding could enable us to improve what we think and do. For example John Brunner's *The Sheep Look Up* (1972), a powerful science fiction novel, calls into question our over-use of pesticides, overeating of beef, and the devastating, long-term effects of air and water pollution on our planet. Relationships among many facets of daily living are explored throughout the book with a depressing message underlying the work. (McCutcheon , 1982: 20)

There are many countries that reduce the importance of the environmental issues and industrial dangers as they increase the construction of nuclear plants, power stations and factories, and they excessively use oil and fossil fuels. They believe the novel as an exaggeration of human activities and behaviors, and also it is an

exaggeration of the description of the terrifying future. There are different views among the authors about the novel. Some believe that the past is different from the present. Energy stations and others are no longer a threat to humans and the environment, as they are safe. Modern technology is a double-edged tool. But as a result of human greed to achieve ambitious goals, it has become bad. Man abuses modern technology where he/she builds nuclear power plants and makes many kinds of weapons such as nuclear, biological, chemical, etc. There is an example of the nuclear bomb thrown by Americans on Japan; it is itself a technological development, but the Americans abused the use of nuclear power to destroy cities

and kill thousands to achieve their control, ambitions and goals. Despite the danger of nuclear programs and the like, they increase more and more. Brunner admits that some people misuse these chemical and nuclear programs and technologies, so he warns of their spread because they are used incorrectly. Throughout the novel, technology and science are used to develop countries and people and to improve their lives in all fields not to destroy. There is a conflict between human technologies and ambitions and the planet's whole environment. Man doesn't adhere to ecological rules and instructions, destroying the present and the future in order to achieve his/her greed and profits. Though modern technology has advantages and positives, however, it has damages and negatives. So many authors of science fiction warn of the dangers and chaos which threaten humankind, the ecosystem and technological society and also cause wars and destruction.

The Sheep Look Up by John Brunner (1972) marks a turning point in the narrative development of this attempt to describe a past that could be envisioned as a future. Even though *The Sheep Look Up* could still be a radical ecologist's bible today, perspectives have changed. Not once is there any allusion in the novel to the real or purported danger of nuclear power plants, and this was at the beginning of the 1970s! the abusively qualified energy crisis that would spread everywhere-especially to France-and the ambitious electronuclear programs following the tripling of oil prices still lay in the future in 1973. (Sander , 2014: 12)

Western countries and companies follow deceiving policies but are devastating. They devour natural and social resources. In this respect, this reminds us of
Marx's

ideas; whereas the western and capitalist countries exploit the natural resources and people effort polluting the environment and its components and causing many diseases and problems. Their goals believe in profits not in humanitarian or the environment. So, Brunner has a predictive and futuristic look warning of the horrible future that awaits us. Western countries have big greed to devour nature resources and abolish cultures, thoughts and traditions of entire nations to achieve their evil and colonial expansionist aims using many techniques. This plan includes the media, commercials advertising and staff working as agents for the benefits of Western

countries. In fact, these employees are traitors to their people (race), their country and their environment. Here, we find the great interest of Western countries in materialism not interested in citizens, the environment, progress or development. As a consequence of expansionism by some European countries, many countries and cultures have suffered, and also many small businesses have been swallowed by large Western governments or companies. As a result of indifferent activities, humankind confronts economic, social and ecological implications. Further, there is no sense of responsibility towards the environment and future generations. In the world, there is an unfair distribution of environmental dangers among the poor and minorities, but it is supposed to be environmental justice where all people deserve to live in a clean and safe environment free from any kinds of pollution.

In Brunner's dystopian future, no such attempts are made. Instead, the structures of Western political economy succeed in devouring natural and social resources, homogenizing landscapes, and erasing cultural and intellectual diversity. In Brunner's world, exploitation is naturalized by commercial advertising and media technologies. Various secondary story lines and vignettes draw attention to first-world materialism and the collective role that private citizens play as agents of environmental depredation through luxury consumption. (Buleavich , 2002: 60)

Brunner tries to draw people's attention and interest to environmentally harmful effects and wasting their effort. He suggests forming a strong active opposition and armed with the present realities and the future concerns. So we, as humans, must sanctify this great mother who gives us what we want or need, and she never stops us

from giving her, despite our evil deeds and damages. The three novels represent stark novels of ecological disaster. Brunner encourages people and his readers to break out of lethal isolation and join teamwork to live a better life. Pollution is formed as a result of humans' activities and using materials, gases, biological wastes, or energy-intentionally or accidentally- released to the environment. Finally, pollution and its impact have disastrous effects on humans and the ecosystem, and we should build our future not destroy or pollute to avoid future disasters.

Brunner, in choosing the determining grounds of his fictional worlds, is not merely foretelling a possible future, but prophesying of one in order to mobilize opposition to its actualization in the present, or at least to prompt reflection on the need for changing what is in order to both avoid what could be and help build what should be. (Stern , 1976: 117)

The environment and its components belong to all creatures not for certain corporations or capitalist countries. But some individuals exceed the moral and ecological borders/limits searching for profits or special interest and advantage. So we as humans should educate, cooperate, and like each other not to be selfish or evildoers in order to live peacefully away from pollution, its impact, disasters and diseases. Christ has taught and given us Commandments and ordered us to like each other with pure hearts. Brotherly love is not a pack of cigarettes that you can buy from a marketplace, not a syringe or a pill. It is soul, emotions, feelings, and your heart's blood. Christ, prophets, messengers and all wise men call for good and ask people to follow the right way to live a safe and clean life. "Christ, what does it matter if we have to take brotherly love out of an aerosol can, but it's not right! ... It isn't a product, a medicine, a drug. It's thought and feeling and your own heart's blood. It isn't right." (Stern , 1976: 120,121).

Sometimes, an optimistic and enthusiastic writer becomes frustrated and pessimistic because he/she does not receive or find a response from others. Brunner's writings attract readers' attention to the horrible world that we live in, in addition, he presents to the world, especially America, advice and instructions to avoid inevitable future disasters. There are many companies and countries that do not want to hear such warnings. In fact, they know the risks and their effects on humans and the environment

such as pollution, lack of resources and plant depletion, etc. But selfishness and profits are their belief and their goal in life, so they attempt to expand their empires and profits. Another author is Dr. Seuss in his acclaimed short stories *The Lorax* and *The Cat*; it illustrates how we, as humans, impact on our natural world and the ecosystem causing natural disasters. This study portrays human beings' bad behavior, activities and reaction against nature and the environment. At the same time, it advises all humans to take personal responsibility to keep our planet and not

to cause any disasters on the earth because the planet belongs to all beings. We shouldn't forget the lack of awareness of human beings; greed, money and power cause catastrophes. Ultimately, man becomes close to losing this beautiful world. The global environmental policy is unfair and even an oppressor. "There is no hope offered that environmental problems can be overcome by any plan, peaceable or violent." (Murphy, 1987: 27,28).

Another example of pollution is oil pollution and its residues, oil refineries and fire in oil fields especially in wars or conflicts, and also the oil spill fouls the water and destroys habitats. The sinking of oil tankers affects people, air, animals, water, soil, sea animals and plants, which lead to the spread of diseases, the emergence of general problems and harmful acid rain to the environment and humans. Certainly, environmental pollution has an impact and serious risks to human health and the environment in general. Here, we have another kind of pollution. We know that medical development; its techniques and positives are for human health to fight various diseases. But there is a downside; the medical waste causes contagious and fatal diseases and pollution. Some use the traditional ways as in the Third World countries, namely burial, and this itself is a contamination of soil, spoil or damage some organisms, groundwater, toxic fumes and pollution around it. Therefore, modern and advanced methods must be used to properly dispose of medical waste. Additionally, it should be sound management to address this problem and avoid its harmful and polluting effects.

Brunner portrays the contaminated ecology and how we pollute and destroy this beautiful planet and ourselves as well. Pollution is similar to a harmful invasive monster; this monster doesn't belong to our attractive and clean world. He backs to give us an imaginary frightening image in order to look after the ecology and its components. How communities

can live or coexist with a monster peacefully. Indeed, our bodies, water, air and food are contaminated and tainted. Although we walk and do many things, we are dead inside; our bodies are polluted and full of diseases. Some people consider this image an exaggeration. The author wants to frighten us to be serious and take responsibility in order to avoid future disasters because the matter is dangerous and serious, not for fun, so he uses this frightening simile. Eventually, the author believes in a clean world where no place for pollution,

disasters or diseases. "The polluted environment itself resembles a rank and invasive monster. Its impurity gets inside people like a vampire's or zombie's taint and converts them into semblances of the walking dead." (J. Smith , 2012: 81).

Lastly, Allah has given us a beautiful and perfect planet where the atmosphere, the hydrosphere, and the vegetation making the Earth very fit for humans to live. More than 1,400 years, the Noble Quran has described our environment for today: pollution and corruption. Many people make/commit small and big mistakes without fear or remorse. So the biggest player in climate and global changes is man. Some people have practiced evil deeds, corruption, and the oppression of the environment, people, plants, animals, etc. the misbehaviours and exceeding the borders appears on land, sea, and everywhere on the planet because of what they have done. They pollute and destroy this beautiful and clean environment looking for ambitions and profits. Humanity lives in this perfect and balanced planet, so we should preserve and protect nature resources and the whole environment asking for good deeds not for evil ones or corruption. "Corruption has appeared throughout the land and sea by [reason of] what the hands of people have earned so He may let them taste part of [the consequence of] what they have done that perhaps they will return [to righteousness]." (Quran , Surah: Ar-Rum, verse: 41).

Nowadays, we shouldn't forget that the whole world is living with an extraordinary event (strange disease). This disease terrifies the whole world. Every day, it moves and crosses cities, countries, seas, oceans and continents without permission or passport. It is very fair. It doesn't differentiate between poor and rich, blacks and whites, master and slave, etc. From an environmental perspective, the Coronavirus or COVID-19 has potential pros and cons. Here, we are talking about the positives. The environmental and climate crisis is the biggest crisis humanity has ever

faced. Coronavirus has played an important role in climate changes leading to the environmental benefits. We note how Coronavirus is affecting the environment. The whole world has experienced many changes in various fields of life due to the disease. It reduces or stops air travel, transportation, waste, factories, power plants, refineries, etc. In fact, the environment might be the only beneficiary of this scary

global monster. Coronavirus is helping decrease carbon emissions and significantly improve air quality. Due to the Coronavirus, millions of tons are not being released as usual and the reduction of: carbon dioxide emissions, economic activity, human activities, and depletion of nature resources, global warming and air pollution that causes respiratory problems. Thus, it has given the planet a golden opportunity to breathe, and also it is a chance to do a self-renewing cycle. Generally, the whole world has seen a significant drop in air pollution caused by human activities and actions. This crisis gives us a good opportunity to confirm in our minds how much the environment is important for our lives and our existence. Many environmentalists considered that Coronavirus is not a full evil, despite chaos and death of hundreds of thousands around the world. And also many scientists point out the positive aspects of the virus and great benefits for the planet, the environment and humans. Ultimately, we must act in solidarity for the interest of our common environment.

Finally, pollution must be taken seriously because it has negative effects on humans and nature components. Humans must admit that the environment is an important and inseparable component in all fields of life. It is not a part of our life but rather represents our existence. So we should increase environmental education advocacy. For instance, to follow correct practices and to mitigate waste and its effects, and also to encourage recycling and reuse. There must be a strong relationship based on mutual respect and friendliness. It is very important to control the emissions and effluents into air, water or soil. Without pollution control, the over waste, heating, agriculture, mining, manufacturing, transportation and other human activities will destroy our existence, the environment and its components. In this respect, the issue of the environment integrates our political, social, and existential life, in addition to all the essentials of life such as water, air, food, etc.

CHAPTER II

2. OVERPOPULATION IN *STAND ON ZANZIBAR*

2.1. Impact of Overpopulation on the Planet and Humans

So many years ago, Brunner pointed out that the future nightmare and the environment would confront us in a hostile way causing serious damages and problems. Realistically, we face this frightening monster these days, which hinders any progress, development or solutions. Overpopulation is considered among the most pressing environmental issues. It plays a main role in global warming, pollution, the extinction of many sorts of plants and animals and overconsumption of limited natural resources such as water, food, arable land, oil, etc. Overpopulation demands a new demography and more consumption for all life's fields and services. So we face a dystopian reality full of multidimensional fear, obstacles and difficulties. There is a dangerous nightmare that threatens the future of the environment and humans together. The big difference between the birth and death rate has led to rapid population growth, and this, in turn, has negatives and even catastrophic effects on both humans and the environment. *Stand on Zanzibar* depicts a near-future community that deals with overpopulation and also represents science fiction, global society, politics, ecosocial problems and ecology which plays a main role in the development of ecocritical studies and environmental degradation. This kind of fiction depicts the horrible imagined future and tries to teach us and guide us how to act and back to reality because of overpopulation. How to solve ecosocial crises and ultimately, and how to avoid pollution. Overpopulation has a terrible impact on the earth and humans; more population means more life needs, more consumption and consequently more pollution. "Science fiction is play that helps teach us how to act; the genre connects imagined histories of the future back to present reality, foregrounding how our actions now will lead to real and somewhat predictable consequences later on." (Buleavich , 2002: 55,56).

Why did writers call "science fiction" is the literature of the future? Because science fiction includes advanced modern technology and correctly predicts man's uses to this technology. It portrays the future of humans and ecology. In this respect, it points out environmental disasters, future developments and events, social and

environmental problems such as pollution and its impact. In addition, it predicts overpopulation, nuclear and chemical weapons, and their dangerous consequences on society and the environment. Therefore, it warns us to stay away from disastrous events and not to commit fatal folly. It suggests that we should intelligently plan and use modern technology correctly to save humanity and the environment together. The world's population increases rapidly as a result of modern medicine, good and modern hospitals, good care, reduction of deaths, disease control, good nutrition and food and clean water. In fact, we confront serious challenges such as resource depletion, pollution, food shortages, etc. Though this issue threatens our life, our environment, our society and our existence, we don't feel what goes on around us. Whenever there is overpopulation, there is pollution and problems. So a society will be realistically complicated and uninhabitable. Anytime we imagine the future and its serious disasters, we feel frustrated and scared.

Science fiction is the literature of the future. It illustrates imaginative scientific and technological possibilities and human reactions to them. Biological science fiction can anticipate future developments. Past science fiction has accurately predicted social problems such as overpopulation and ecological disasters and technological developments including lasers, computers, and nuclear weapons. (Marks , 1978: 275)

Population growth and satisfying people's needs lead to a higher rate of consumption. The misuse of resources leads to the depletion of nature resources and an increase in environmental pollution. Pollution has a catastrophic impact on humans and the planet. Additionally, pollution plays a major role in destroying many of natural resources; almost the environmental components become polluted like air, water, food, and soil, etc. For instance, Asia is the most populous continent. About 61 % of the population live in Asia. China is 1.44 billion, and India is 1.39 billion. Overpopulated areas face many serious challenges such as climate change, flooding and overconsumption of natural resources. Thus, we wait for a devastating future including humans and the environment and full of diseases and epidemics. *Stand on Zanzibar* talks about serious social and environmental issues that will occur in the near future. One of the most important issues is overpopulation and its effects on society and the

environment where nature resources are misused and even depleted. And the spread of pollution and diseases. "John Brunner's *STAND ON ZANZIBAR* (Ballantine) shows the possible effects of overpopulation and misuse of resources;" (Kafka , 1975: 50).

The author points out that science fiction can really extrapolate risks and accurately predicts disasters and changes in the future. And also it has high ability and deep thinking about occurrences and events in the near future. Indeed, *Stand on Zanzibar*, widely considered one of the most important science fiction novels. It focuses on overpopulation which is a real problem and a source of anxiety where a miserable social condition, inequality, congestion, the heterogeneity, disjuncture, pollution and racial discrimination. These dangers pose society and the environment to destruction, so they need attention and measures to be solved in order to maintain ecological integrity and keep our existence. Brunner has a wide science fiction, including many sciences and predictions. As he focuses on the environmental, social and economic future of the planet rather than the far future. Brunner illustrates what the world acts, directly or indirectly, harmful to both humans and the environment. Zanzibar is a small place that cannot endure overpopulation and toxic pollution. Further, Pollution of air, water, food, plant, soil, etc. leads to suffocation and killing humans and destruction of the environment. This nightmare threatens Zanzibar, leads to demographic pressure and more depletion of natural resources. Eventually, we note that the novel includes political, social and environmental intersections and because of overpopulation, many people don't care about the species of plants and animals that become extinct which leads to disastrous effects and imbalance in the ecosystem as well.

In *Stand on Zanzibar* (1968) ... John Brunner has used science fiction's basic ability to extrapolate, focused on the socio-economic near future of Earth instead of the far future of interplanetary exploration ... Brunner's future is a dismal place of large warfare in small countries, crippling overpopulation, poisonous pollution, and a generally-decaying quality of life. (C. W. Sullivan , 2001: 290)

Overpopulation leads to a reduction: in the standard of living, investment, growth rate and a low income. On the other hand, it will increase consumption and

pollution. In this regard, the overpopulation reduces reinforces of economic and environmental capabilities such as education, health, food, water, etc. In Zanzibar, multiple races such as Arabs, Indians, Africans and Europeans where racism and competition are clear. Every racial community tries to increase its population in order to dominate and prevail more. Further, each group has an external affiliation, but in reality, the dominant power is British. In this case, population increases more and more. And the depletion of natural resources and the lack of services in all its forms gradually increase. As a result, there is a fertile environment for pollution and diseases. Ultimately, Zanzibar becomes a polluted place and full of diseases because no one cares about the environment and its components; races' care focuses on population growth, election and control finally. "The Zanzibar problem was economic in nature. But one can observe racial character hidden in it as Land Alienation Decree clearly exhibited the racial segregation policy of the Imperial power." (Thakur , 2007: 1240).

How we imagine a society that is full of competition, differences, conflicts and disagreements; it would be an example of underdevelopment and pollution. Overpopulated areas face many serious challenges such as a failing environment, asinine governments, teeming places, rampant crime and hunger. As we note that every party or group believes in a rapid population increasing in order to win the elections and dominate. As a result of overpopulation, environmental disasters and environmental pollution have begun to appear such as pollution of air, water, food, plants, etc. For competing parties, pollution and its impact on humans and the environment is not a problem, the most important is to win and control. "The West district has grown from 3 constituencies into 9, in line with its rapid population growth. It was by the far the most populous region in 1995 and 2000 and now holds almost half of Zanzibar's population." (Rawlence , 2005: 521).

Humans misuse or overuse of nature resources and its components because of increasing needs and overconsumption. The unfettered population growth destroys cultivated areas and forests, which leads to barren landscape, desertification, high illiteracy rates, family disintegration, widespread poverty, unemployment and a high crime rate. Some families depend on their young children to survive, as this is a stark

social problem that hinders or prevents the development of society. Finally, the collapse of public facilities and services such as education, health and the destruction of economic growth and imbalance of the environment and its components. Some dictatorial regimes and within their simple traditional concepts have a limited outlook. For example, overpopulation represents an urban state that can be proud of its environmental, social, psychological, economic, educational and health outcomes. These systems are not concerned with the quality of life or infrastructure, so they will notice widespread pollution of air, water, food, overconsumption and diseases. On the contrary, Brunner's concepts and predictions, about the far or near future population increase, explain the dire consequences. Furthermore, there is a strong relationship between man and the environment that depends on the loading capacity which leads to people's suffering. If the population is reasonable or limited, the reactions of nature will be positive. But if there is overpopulation and evil activities, the reactions of nature will be negative, and its effects will be harmful to both humans and the environment. We definitely expose to serious concerns of congestion and crowding causing famine, food riots and the scarcity of resources. Thus, the overpopulation nightmare represents a serious threat to humans and the ecosystem. And also it shows the erosion of individual privacy with dangerous social, environmental, psychological, and economic results.

Overpopulation was envisioned as an essentially urban condition that manifests itself in nightmarish crowding and the erosion of individual privacy, with serious social, psychological, and economic consequences... John Brunner's *Stand on Zanzibar*, develops a different perspective of human identity on an overcrowded planet by foregrounding the transforming impact of emergent media technologies; as a consequence the outline of an alternative conceptualization of the relation between human and nonhuman forms of consequences, on the other, begins to emerge. (Michael P. Branch , 2003: 73)

In the world, many countries are unable to provide living space, services, housing and food for their inhabitants because of overpopulation. They suffer from the scarcity of food, nutrients, accommodations and water which make the environment highly fragile. It is supposed to be cooperation and coordination among countries to transcend opposition, hostility, suffering, and unfairness and work

together toward a better world for all. Last but not least, governments burden social, economic, political,

ecological and living responsibility. Brunner is distinguished by his brilliant views and future predictions, suggesting solutions to avoid environmental disasters resulting

from pollution due to overpopulation. And also he treats social, psychological, political and economic crises due to overpopulation. He illustrates that each future stage is linked to an economic, social and political level or standard. Births should be determined in proportion to consumption and population density in order not to move to megacities. Because overpopulation has dire consequences for society and the environment such as pollution, diseases, lack of services, and more, behavioral, social, and psychological diseases. All these phenomena play a main reason in a society collapse and pollution increase. Indeed, our future represents our existence, and all people wish for a bright future, not a miserable one. But this wish does not come by chance, but rather requires rational acts.

John Brunner's *Stand on Zanzibar* (1968) should be mentioned. Drawing on demographic transition theory, Brunner is the only author discussed here to defend a developmentalist position, relating each stage in the future transition to a level of economic development and form of political system. This work is also an example of the fictional treatment of the social pathologies supposedly induced by overcrowding-sudden rage attacks and running amok. (Domingo , 2008: 730)

There are many authors convinced and admired with Brunner's novels which warn of the future disasters. Here, Scholes praises Brunner for his professionalism and his wonderful works. They believe that it is necessary to be like these novels to instruct us and avoid disasters. The author's efforts and views bring vivid consequences for our future. Overpopulation is not just a theoretical threat or a tale for entertainment; it is a demand for more energy sources and depletion of nature destroying the balance of life for our profits and convenience. Finally, Brunner's literature of the environment aims to guarantee the clean future not to exploit the nature resources; the future free of pollution and diseases. "Scholes praises John Brunner's *Stand on Zanzibar* and *The Sheep Look Up* for their aesthetic achievement,

but also for their apocalyptic account of overpopulation and pollution." (Sanders , 1976: 189).

Man's activities and greedy ambitions represent a serious threat to the planet. Modern sciences have focused on profits and the catastrophe itself, not the doer or reasons, so it is a big disaster. Ultimately, the human race and the earth will be devastated by overpopulation, pollution, atomic war or diseases. Despite the critical importance of pollution and its impact on humans and the planet, many people don't care and act neglectfully. In fact, Brunner's remarkable and notable claims about the future are valuable and real. Overpopulation causes serious fear and concerns. So we shouldn't deny Brunner's works and warnings, on the other hand, we should follow them to avoid horrific consequences. "John Brunner (*Stand on Zanzibar*) presents a millennial total of seven billion as horrific;" (Shriver , 2003: 158).

Brunner's novels substitute a dystopian image. Everyone should take responsibility for himself and his race where there is no place for selfishness and individuality; the whole faces the same problem and the same end. *Stand on Zanzibar* represents a pessimistic world where overpopulation means more violence, more aggression and more problems among people. It has become far too complex and far too painful for its inhabitants to even attempt to control. Environmental pollution represents a serious problem that threatens the survival of mankind and other living beings. So we are worried about environmental pollution because we face serious consequences every day, through the polluted air, food and water that we consume. Additionally, it represents the overpopulated earth, intersections of politics, science, society, and the environment. We are punished by nature because of our bad behaviors and activities. Some authors call it the population bomb. More importantly, there is a strong relationship between man and the environment, but many greedy governments or exploitive corporations deny this relation and ignore warnings. Moreover, they endanger the lives of humans and the environment and cause problems and crises. Brunner's efforts in *Stand on Zanzibar* to imagine the interactions between people and their environment on a global scale correspond with efforts within cultural studies and take responsibility towards our planet.

Force upon us the consequences of our present behavior with a power which no other form of discourse can hope to equal. Rather than giving readers the "answer" for overpopulation or the formula for ending aggression and human

violence, Brunner supplies a vision of the future in which these problems are not being sufficiently tackled, and thus encourages his readers to feel a sense of responsibility for the negative trends developing in world culture. (Murphy , 1987: 25)

In the course of the novels, there are monsters that threaten humankind; one of them is megacities and dangerous impact. Additionally, they depict the future disasters and discuss the environmental, social, economic, political, racial issues and densely populated areas. But some countries are not interested in these concerns. The industrial renaissance of the developed world was associated with the export of pollution to developing countries, in addition, the lack of developing countries because of poverty and illiteracy of the concept of environmental security, which is represented in providing clean and advanced life without pollution and its harmful impact. The developed countries conduct harmful experiments to the environment and pollute people and nature elements (the environment) in developing countries, not interested in others. Later, the consequences of misuses and exceeding the limits appear bit by bit. The US uses environmental, economic and political exploitation as a way to control the third world and underdeveloped countries. It practices different activities and actions considering others as farms or field tests without caring or interest in any element. Ultimately, the US harvest the positive results but others the negatives ones.

All three novels are the relationship between the United States, with its overdeveloped, ecocidal economy, and the developing and underdeveloped countries. Some aspects of these relations are diagrammed in the "Context 4" chapter of SZ. Things as they are-economic exploitation and political and military intervention as the dominant mode of US-third world relations. (Stern , 1976: 115)

In these lines, Brunner points out both overpopulation and racism in one area, Zanzibar. It contains multi races and a number of competitive parties. And each party looks for control neglecting the country and its facilities. These factors cause serious ecological disasters. How we expect this area, which is full of problems. We should acknowledge pollution is the nightmare of the future with an increasing population, conflicts, wars, and neglect of the environment, leading to global warming with horrible and shocking consequences. Additionally, overpopulation, economic

development and industrial development have led to energy consumption more than before and the increase of waste and emissions too. "Zanzibar features an ethnically diverse population of approximately 300 ...The population is politically divided between three nationalist political parties." (Lofchie , 1963: 185,186).

A serious issue faces and threatens the planet and the near future too; it is overpopulation. This issue must be taken seriously. It requires consumption of large quantities of nature resources. Thus, pollution of different types namely water, air, food and soil will be exist. Furthermore, chemicals and pesticides play a major role in food production increase causing many diseases. Countries and individuals should take responsibilities and outlook to avoid disastrous consequences and secure a better life for citizens. We hurt and damage the ecology because we consume too much or we consume the wrong kind of things. So the effects of environmental degradation await us. Brunner advises his readers, individuals and institutions to be aware of this problem because of its negative repercussions on man and the environment. And also they should respond to the problems and crises which face them and seek to solve them, not to deny them. If we wish to have a more sustainable relationship with our environment, we will consume less or, at least, smarter and better. Some people or corporations are greedy, sinful, and corrupt. They prefer exploiting cities and people's conditions. Cities are a place of overpopulation, pollution, congestion, noise, and turmoil, so they represent a fertile soil to spread and a source of their income. In the course of time, the inhabitants will be victims of their corrupt and evil acts. Not to forget that overpopulation has negative effects on society, for example, violence, crime, poverty, homosexuality and complete isolation as well. Indeed, because of overpopulation, the world has exploded.

Brunner's plot places the responsibility on readers to synthesize multiple narratives of overpopulation, natural resource exploitation, third-world poverty, first-world materialism, government espionage, political repression, genetic experimentation, racism, and inner city violence. Furthermore, it asks readers to evaluate the ways in which various individuals and institutions perceive, explain, and respond to environmental crisis. (Buleavich , 2002: 58)

The mass media plays a main role in people's awareness and educating them regarding overpopulation and the environmental dangers and how to avoid them. The

Earth is not just for humans' property but for all living things. However, because of humans' greed or ignorance, they have destroyed this planet and polluted the air, water

and land. Although there are environmental and social problems that cause pollution,

deadly disasters and diseases, many countries, individuals and institutions act selfishly as if these problems do not exist, so we confront a real catastrophe. In fact, the western corporations and individuals have economic expansion-desires to build material empires and achieve more profits and advantages where they deny social, economic, environmental problems. Their greed makes them blind to see the miserable reality. Moreover, they believe in modern technology that will solve all problems and crises. All humans agree that there is no immortal human being, so everyone should not be selfish, and he/she must take responsibilities towards actions and activities. Man should build not destroy, plant not cut off, help animals continue not kill them. Additionally, man seeks to improve the environment for the whole not to live a luxurious life and others to hell. Each one should be the guardian of the environment components; oceans, rivers, seas, air, plants, animals and the environment broadly.

Despite planetary overcrowding and the media attention that it draws to issues of environmental limits, social reality in the West remains predicated on individual and institutional desires for material growth, affluence, and economic expansion-desires fed by a faith that forthcoming technological innovations will solve population-resource pressures. Though very much aware of ecosocial problems, then, the inhabitants of Brunner's world continue to act as if those problems do not exist. (Buleavich , 2002: 58)

The author writes imaginary expectations about different countries; developed, developing and underdeveloped about the near future. The first-world like America, England, etc. consumes huge natural resources, so they take serious responsibilities for their role in widespread devastation and ecological pollution without care or interest in others. There is a big problem; the first-world doesn't admit and even denies its responsibilities toward the ecological destruction. So population resource crises and dangers will not stop. "Population- resource problems will continue until

first-world consumers accept responsibility for their role in environmental depredation." (Buleavich , 2002: 61).

There is a complicated and mutual relation between man and nature. Man or institution tries to establish human settlements and colonies on this strange planet. If man recognizes the core of relation, he/she will coexist very well and avoid the

environmental, social, populated disasters. The author calls for sanity in our practices, actions or activities on the planet we live in. Egotistical insanity prevents logical thinking and ultimately leads to the destruction of the planet. So we should cooperate and work together as a team to avoid a terrible future. "*Stand on Zanzibar's* business-as-usual ending suggests to readers that substantively addressing repressed ecosocial problems depends on our ability to recognize the complex relations among institutions, individuals, and the natural world." (Buleavich , 2002: 65).

Overpopulation monster frightens the whole world and causes crises and disasters such as environmental degradation, the spread of diseases and famines in different parts of the world. Many scientists, futurists and activists try to educate people and support them to find solutions for environmental and social problems. On the other hand, powerful political leaders frequently hold conferences and discourses to discuss overpopulation, its impact and environmental problems. They give attractive speech and repeated promises, but they are just words not actions. Practically, they do not fulfill any promise or sentence. Further, they know that humankind faces a dangerous environmental situation and a lack of resources. We know that these leaders claim to be supporters of the environment. Surprisingly, those leaders continue and participate in the destruction of the environment. The novel represents a prophecy of the dystopian and environmental future and criticizes contemporary global socioeconomic relations. Certainly, the Western world doesn't accept the fact that no technology will rescue us from the miserable future. So we are increasingly concerned about the environment and increasing pollution, and on the other hand, greedy, selfish and political leaders continue to degrade the environment and increase pollution. Therefore, it's supposed to be effective, social and environmental procedures to confront crises and put an end to the endless waste of natural resources and pollution.

We, too, must address ecosocial problems by critiquing the various discourses-scientific, political, economic-that inform our understanding of our ecological situation. As recent supply-driven energy policies in nations such as the United States suggest, traditional economics and repeated promises of around-the-corner "energy-efficient technologies" continue to shape political and social responses to dwindling resources. Three decades after the publication of *Stand on Zanzibar*, critiquing the ideologically inflected discourses of nature

represents an especially important activity, particularly since virtually everyone-powerful political leaders included-now claims to be an environmentalist. Ironically, at a time of increased anxieties about environmental limits, many continue to participate in the practices that perpetuate ecological degradation and resource exhaustion. (Buleavich , 2002: 66)

Overpopulation is a reason for many crises such as pollution, aggression, violence, immoral behaviors/acts and a reduction of social and medical services. So pollution spreads everywhere; the pollution of water, air, soil and food. All these destroy the ecosystem and human health and cause many problems and contagious diseases. There should be organized, social and environmental relations between man and nature. Given the horrible ecological conditions, overpopulation and irrational behavior or activities, a man should bear the responsibilities and act as a man, not a rat for the future of humanity. "The people of the United States are little more than rats, and, like rats, they have turned to mindless aggression as a result of the overcrowding." (Goldman, Heroic Man in Unheroic Society , 1978: 262).

All humans acknowledge that overpopulation is an undesirable condition. It leads to deforestation, more products, more oil and emissions, scarcity of water and food, aggression, violence, widespread crime, drugs and illiteracy, unethical workers and lack of education and awareness. Moreover people's interest is focused on ridiculous things. In fact, it is an example of a disintegrated society; morally, environmentally, culturally and educationally. Bad things are available, so it is difficult to live in this polluted atmosphere. There is a group of people who live and prefer this backward society and do not want to change because it represents their

true environment. There are many individuals and governments looking for greed and profits refusing to behave and act as human beings even though they know that mankind's future is at risk. Pollution is the future issue because of its repercussions and dangers. As human awareness is the most important, we always need to educate people to prevent further deterioration on the planet due to the excessive use of nature's resources and elements. Overpopulation has serious consequences such as increased consumption of food, water and housing, lack of education, health care and environmental awareness. Moreover, not violation on nature's resources but depletion,

and finally desert forms. Therefore, the author suggests facing pollution and its terrible impacts. Ultimately, all members of any community bear responsibility to control overpopulation and interest in society and the environment. So governments, companies and even individuals should declare and endorse a series of air pollution control schemes.

Overpopulation might cause aggressiveness, humans who refuse to face the problem ensure its continued existence. Thus, the availability of mind-clouding drugs, the exotic emphasis on costume, the mindless parties of the wealthy, and the self-righteous enforcement of population control are all geared toward either dodging the issues or relieving the individual from any sense of responsibility for what is happening to him and the world he lives in. (Goldman, *Heroic Man in Unheroic Society* , 1978: 262)

Stand on Zanzibar is a description of a deep shock of the near future because of overpopulation. We can live within our limits and means instead of exhaustion of natural resources and unrestrained, excessive and wasteful uses of resources. The author appeals to humans to establish an ideal and global community without any pollution or impact. He describes the Earth with a loving, kind and compassionate mother who gives her children what they want or need without any hesitation. But this great and patient mother has a limited capacity, and she suffers from overload and heavy burdens. Here, we have personification where the writer gives human characteristics to the earth. In this respect, our violent and threatening behavior, activities and actions cause diseases and problems. Overpopulation and pollution damage the atmosphere (lungs), the hydrosphere such as seas, oceans, and rivers

(arteries), etc. Eventually, we choke and destroy our Mother Earth because of nuclear, chemical and biological experiences and smoggy haze. Moreover, we cause fatal pollution and many diseases for our living organisms. We live on this beautiful and generous planet; it is like a ship in a short voyage. In this respect, overpopulation, resource depletion, pollution and congestion have dangers and lead to destruction.

This living organism we call Mother Earth can't stand that treatment for long-her bowels tormented, her arteries clogged, her lungs choked... But what's happened inevitably as a result? Such a social upheaval that all thoughts of

spreading this-this cancer of ours have had to be forgotten! Yes, there's hope! When starving refugees are besieging frontiers, armies can't be spared to propagate the cancer any further. They have to be called home-like ours! ... We can just about restore the balance of the ecology, the biosphere. (Goldman, *Heroic Man in Unheroic Society*, 1978: 268)

Many writers and conferences have spoken and predicted terrible consequences about the ecosystem and society in the future because of the quick growth, which has horrible concerns. We as humans threaten our existence and future's generations. How we can coexist with these serious crises; overpopulation or overpopulated areas and pollution. Our beautiful environment is destroyed by our neglecting and not controlling the fast growth. So it is supposed to have strict limits and rules to control population growth and people's actions. More clearly, the collective use of public, nature resources and overpopulation and its impact on the environment has raised the alarm. Furthermore, the depletion of nature resources and high consumption lead to environmental, social and psychological transformations in populated cities because we have exceeded the carrying capacity and this in turn will be reflected in the air, water, food, housing, transportation, education and health care. It is clear to see signs of underdevelopment, misery, poverty and pollution everywhere; the air will be a haze of dust and smoke. We as human beings contribute with the non-human species of this universe, so we must protect, keep and take the right measures instead of polluting and destroying.

The rapid growth of humankind has periodically given rise to deep worries and dire predictions about the future. In the twentieth century, concerns over

population growth came to a head in the 1960s and 70s with the publication of such books as Paul Ehrlich's *The Population Bomb* (1968), the Club of Rome's report on *The Limits to Growth* (1972), and Lester Brown's *The Twenty-Ninth Day* (1978), all of which predicted horrendous consequences for the environment as well as global society if population growth were not brought under control. (HEISE , 2001: 3)

Population inflation plays a major role in polluting the environment and nature and destroying humans' future. There is an environmental balance that includes both

the nature components and man. Therefore, it is dangerous to pollute the basic environmental components such as air, water, soil, and animals; nature belongs to all beings and organisms. For example, the excessive use of chemicals, to increase production due to the rapid population growth, and factory smoke constitutes what is called pollution. Here, we enter the dangerous circle of destroying the environmental balance or ecosystem. The overpopulation and consumption/depletion of nature resources have led to a serious environmental crisis. The problem is a violent human nature that sees nothing but its own profits. Man does evil deeds for his/her ecology comforts without caring about others. Therefore, we should take the issue seriously and consider it serious and dangerous, and also it threatens our life and our environment as well. "overpopulation is no longer a mere theoretical threat; the insatiable demand for more energy sources finds us destroying the balance of life in exchange for mere convenience." (Haslam , 1973: 42).

In fact, population growth is a big challenge, so Brunner warns against selfishness, individuality and irresponsible behavior. And he emphasizes the interest in ecology, sociology and others. Here, he criticizes Hogan's aggressive and irrational behavior. Apparently, an advanced industrial community is a means of social control and flight from rationality. There are interactions and strong relations between man and the environment, based on mutual respect and justice where there is no place for oppression. Regardless of the ecology, man has primitive rules and principles, must be followed to keep the environment. So man's activities should be fair, not to oppress or abuse surroundings; it is unfair to live in paradise and the others to hell. In response, we should take many kinds of strategies to prevent and control pollution. "A man should behave as a man. No matter what the environment,

can the human race afford to become a mere reactor against the environment? Is the intolerable condition of the world of *Stand on Zanzibar* sufficient justification for such behavior?" (Goldman, *Heroic Man in Unheroic Society*, 1978: 262).

Brunner's three novels exemplify sequential ambitious and dialogical structure, and they represent a good example of remarkable and demanding novels. In addition, they share ecological, cultural, social and political themes, and they include

intersections of different issues. Some people deny their evil deeds and destructive

activities or actions for the planet and humans. In the course of the novels, Brunner refutes their theories, words, and actions, further, he demonstrates their greed contaminating the environment, not cares about those around them. Both novels describe a bad situation and unfair society that is full of suffering and oppression in the future. So they warn us of the inevitable crises and disasters and not to commit fools to avoid the bleak future. "His major achievement was an ambitious series of dystopian novels that focused on social and environmental issues, including *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972)." (Sawyer, 2001: 333).

Smoke emitted by armies, cars, factories and agricultural activities leads to economic, human, animal and plant losses and damages. Most pollutants and waste materials found in the oceans, seas, rivers and forests come from human activities. So in the US and other developed countries, institutions and institutes have been established to study pollution problems and how to get rid of it. However, the United States, to satisfy its ambitions, is engaged in an undeclared environmental war causing pollution and many damages without interest in nature or people. The United States carries out programs and proposals, practically, they are hidden disasters. It launches various projects and declares its support for poor and developing countries. It pretends to spread progress and development everywhere. It uses the media to convince the public and mislead as well. Indeed, it plunders the countries and nature resources. It takes advantage of natural resources and human effort. It establishes and builds power stations, factories, military bases, etc. leaving a lot of pollution. We note that both novels point out the dangers of pollution due to modern technology or overpopulation. In fact, overpopulation requires more food, more places to live, more

consumption, and thus more pollution. It colonizes many countries under false slogans performing evil schemes and actions. For instance, the buried nuclear, chemical, or hazardous wastes has disastrous consequences, and this is a dangerous form of environmental pollution. Finally, we are in the face of the despoliation of our environment.

Stand on Zanzibar (1968) and *The Sheep Look Up* (1972)...the relation of the US to the rest of the earth's societies [...] take the form of a total but undeclared

ecological war-an invasion less of Western biota than of industrial pollution, resource extraction, and neo-colonial developments projects. (Latham , 2007: 114)

Brunner looks very pessimistic in *Stand on Zanzibar* because of social, demographic and geographical changes. Overpopulation and its significant damage lead to serious environmental and social issues. Smoke and its emissions of transportation, factories, and industry contribute to air pollution. Undoubtedly, overpopulation has increasing needs and more consumption, so we see the harmful effects of air pollution. Some people or companies throw harmful materials or waste into the seas, rivers, and air or near housing causing damage to people and the ecology, in addition, they help spread diseases. Here, the author is pessimistic, and there is no collaboration between Brunner's views and humans where the solutions are undiscoverable or no solutions without a miracle. Ultimately, the environmental consequences and the imbalance of the ecosystem will take place sooner or later. "Brunner would also write two better-known demographic and ecologic dystopias: *Stand on Zanzibar* (1968) and *The Sheep Look Up* (1972)." (Hickman , 2009: 150).

In Zanzibar, overpopulation plays a major role in economic, social, political, ecological changes. There is a direct proportion; the increase in population growth depends on the increase in factories, transportation, food, water, violence, crime, unemployment and illiterate people. And also a reduction in health care and education, which leads to pollution of: air, water, soil, etc. In the end, society is a victim of some people's activities and uncontrolled companies. Within these dismal and polluted circumstances, society will be full of diseases, problems and collapse as well. So many people yearn to live a better life in a utopian society where everything

is good and pleasant. Ultimately, overpopulation has dangerous consequences on society and the environment where waste, pollution, crimes, drug and physical and mental diseases are spread. "In the less Utopian society of *Stand on Zanzibar* (1968) the nuclear family becomes a victim of general over-population." (MONK , 1984: 210).

Many authors show approval of Brunner's novels. Here, Scholes praises Brunner for his wonderful and distinguishable performance; his science fiction depends on certain concepts to construct the near or far future. He presents apocalyptic visions and harmful warnings about our destruction of the environment. As a result of using the nature resources excessively and pesticides; they have had a dangerous impact on the environment. We live in polluted ecology that has exhausted its resources and energy.

Thus, we face serious dangers such as the pollution of nature components and even the inevitable environmental catastrophe. Brunner refuses to leave us to give the consequences and effects of overpopulation. It leads to pollution in all its forms, and also violence, social disintegration, unemployment, depression, illiteracy, congestion, sanitation, etc. Eventually, he frightens us to avoid the destructive confrontation.

The novels *Stand on Zanzibar* and *The Sheep Look Up* are well-known and admirable, and they express ecological visions and concerns as well. The environment is an important and fundamental part of the human world; it represents man's existence. Therefore, man must fully integrate into his environment and all its components based on ethics and rationality. Moreover, humankind must establish continuity and mutual relation between mankind and nature taking advantage of interpretations of the past and visions of the future. These novels can be considered distinguishable works that show an eco-cosmopolitan vision in order to reconstruct the ecology and society and to achieve the benefits and advantages for the whole world; humans and others. "Scholes praises John Brunner's *Stand on Zanzibar* and *The Sheep Look Up* for their aesthetic achievement, but also for their apocalyptic account of overpopulation and pollution." (Bernheimer , 1976: 189).

It is right that *Stand on Zanzibar* talks about overpopulation in a certain place, Zanzibar. But Brunner has addressed all the humans and warned of dangers of overpopulation in any place in the world to avoid the miserable future. Overpopulation has become the world's main crisis, so he has used a distinguishable style with high technique and mixture of worries to attract the reader's attention. The novel depicts the problem skilfully and carefully and gives gloomy forecasts about the serious effects. Despite miserable and awful conditions, we should have hope to change and move toward better to avoid the worst. And also we should be aware of ecological matters and the risks of overpopulation because we have responsibility to our society as well as to our planet. Thus, he illustrates the dangers of overpopulation. "In *Stand on Zanzibar* Brunner juxtaposes, through a mosaic technique, various characters, countries, and plots to create a depressing vision of a near future in which overpopulation has become the world's major problem." (Fitting , 1979: 68).

Indeed, overpopulation represents a spatial problem, where the area isn't enough for a huge number of people because any place in the world, big or small, has limited capacities. Zanzibar is an island, not a wide or open land; it is like sardines in a can. This place can't bear demographic pressure and overcrowding, or it will be under pressure of overconsumption and pollution. So it is like a balloon which nearly explodes/bursts. Ultimately, the situation is like a temporary bomb. The environment has limited capacity, so population explosion leads to serious problems such as psychological pressure and pollution with different forms, and the situation becomes unbearable. Further, social prohibitions become allowed such as drugs, killing, ransack, stealing, sex, radical views, arms spread and violence as escape of reality, and there is no problem to deal with them. Some people reach spiritual death, where chaos and madness, or biological death as a result of spiritual death. Certainly, chaos and disorganization of the social system lead to great psychological pressures. We should have deep thinking and creativity to face changes and problems and to find solutions. Thus, the ecosystem has limits, and we shouldn't exceed them to avoid the future disasters.

Psychological pressures heap one on another until the weight grows. In response, social prohibitions give way to sanctioned forms of escape, including casual sex, plentiful drugs... The world of Zanzibar warps and bulges from its own internal pressures. To use one of Brunner's favorite metaphors, it is like a surging blast pushing against the monstrous shaped negative-plate of an explosive forming press. (J. Smith, Chapter Title: FIERCE SPECULATION, 1967–75 , 2012: 62)

Narrative writing takes the reader to the time and place of the world which the narrative writing depicts. Additionally, it tries to give us new ideas and motivates us to create new ideas and solutions for the future. Speculative fictions create a special kind of novels that imitate and depict the environmental and social issues of the future, in addition, they are connected with models of the destruction of humankind and the planet. By describing the social details, they threaten the capitalist economy from inside. So we must take precautions before it is too late. "*Stand on Zanzibar* (1968), with its colossal accumulation of narrative pieces,...gives us a palpable sense of the materiality of an implosive 21st century...Exhibiting the tension so fan uncertain future

without feeling the need to reabsorb them," (Boris Eizykman , 1985: 83).

Although the problem of overpopulation and its consequences is one of the biggest in the world, we see many countries do not take the issue seriously and merely provide instructions without strict laws. All people nearly pretend that they are against overcrowding. But they aren't interested in this serious issue and they live in their own world. Every time, they give promises but without any adherence. Humans don't learn from their mistakes or others' mistakes and they look for more profits and greed. Indeed, they live in a world full of dangerous challenges. We will not see any progress or an advancement because the population explosion is the enemy of stability and development. Eventually, the futurists and the authors appeal the world to think deeply to save their lives, existence, the environment and their future, and to put an end to rapid population growth to reduce the world's disasters, but their efforts are useless. "POPULATION EXPLOSION Unique in human experience, an event which happened yesterday but which everyone swears won't

happen until tomorrow." —John Brunner, *Stand on Zanzibar* (1968). (Westfahl , 2005: 264).

2.1.1. Impact of Overpopulation on Food and Water

Many future activists, experts and writers, interested in overpopulation and its serious future effects, have held awareness campaigns, conferences, etc. about population growth, but they do not note or see any responses or interactions. They educate people and provide them with new ways and measures to slow population growth, family planning, education, gender equity and good living (no poverty) to reduce pressure on the planet and to face a population explosion. Additionally, awareness campaigns always warn of the dangers of overpopulation as it leads to more needs and more consumption. Therefore the ecological disasters such as global warming, food shortage, overuse of land resources, economic deficit, diseases, water crisis, poverty and widespread unemployment. Eventually, pollution awaits humans and the earth together and destroys our beautiful environment. Apparently, many societies, governments and individuals live in their current time without having any visions of the future. We should not behave as if this planet belongs to us, our field is limited not to exceed. Like us, the others such as the future generations, beings and organisms have the right on this planet. Ultimately a group of young Australian

environmentalists decided to spread a virus around the world to reduce the world's population pressure on the planet. The planet is under demographic pressure, so it's normal to face negative reactions.

A group of young Australian eco-idealists design a virus that will leave humans sterile. Their aim is to disseminate the virus worldwide and shrink population to two billion over 40 years,...Here multiple catastrophes intersect global-warming floods, monetary collapse, food shortage, and mass unemployment each exacerbated by population growth. (Shriver , 2003: 156,157)

Here, we have a wonderful example about destruction of the environment and our existence as well. One of the roots of pollution's problems is overpopulation, where rapid population growth is unusual, and it threatens the world system. Human activities exist in cities where population pressure and resource consumption rapidly,

moreover, population resource problems continue. Realistically, uncontrolled growth is offset by overconsumption, more demographic areas, more food and water, more industrial output and more pollution. So our life and the ecosystem face an inevitable collapse. Though there are many warnings about our planet, no one cares about nature and its resources or inhabitants. So we note the social and the environmental impact of overpopulation over the world. "Uncontrolled growth in any of the major variables (food production, population, pollution, resource consumption, industrial output) will lead to collapse of the world system." (FIFTY SOURCES , 1978: 26).

Overpopulation represents a future monster where it exceeds the planet's carrying capacity, so it leads to people's more suffering and more problems. Here, education plays a prominent and important role in educating all classes of society and providing them with the skills, ideas and information that achieve them a clean environment free from pollution. According to Brunner, overpopulation is an important topic because it costs a lot of water, effort, education, food, medical care, etc. with little awareness, knowledge and eventually pollution will be everywhere. Scientists have their genetic experiments to develop their experiments but uninterested in the environment and further, these chemicals will cause contamination for soil, air, water, food, plants, animals and humans. In the course of the novel, Brunner provides distinguished theories and instructions about the environmental problems and their

effects on both humans and the planet. His theories are not for fun; they represent a bitter critique of the issue of overpopulation. They also represent real concerns facing the whole world. Therefore, the necessary measures must be taken to avoid the coming

disasters. For example, Paul portrays overpopulation as a time bomb and soon explodes, destroys, and pollutes everything around it. Political parties are interested in competition to control, not to look forward to improving living or solving problems. "*Stand on Zanzibar* critiques mid-twentieth century unicausal theories of environmental problems-as found, for example, in Paul Ehrlich's *The Population*

Bomb (1968)-and dramatizes the ideological blinders that prevent societies from taking corrective action." (Buleavich , 2002: 53).

Overpopulation represents a serious threat to sustainability of the community and leads to economic and political corruption, conflicts, pollution, social inequality, etc. It is supposed to be serious governmental initiatives and avoid overconsumption. We live in this overcrowded planet, so we definitely face megacities and many challenges such as providing education, water, food, medical care, more consumption, more transportation, etc. Thus, there will be negative social and environmental consequences. There are disasters that fall gradually down because we rarely see people interested in overpopulation problems and its impact. The ecosystem represents integrated and intersectional circular series, so we must take real measures to protect ourselves and the ecology system and also to avoid future problems. "The nature and impact of overpopulation outside urban space or in relation to other species and environments were only rarely considered." (HEISE , 2001, p.2).

2.1.2. Impact of Overpopulation on Education and Health Care

Humans represent an active part and also the most important element of this planet, so we should not ignore the ecological and climate changes on the planet. Population density represents a big problem that threatens the economic, social and infrastructure, and it causes future disasters and diseases. Further, we see a few prevalent treatments for overpopulation. Everything is not enough; medicine, health care, housing, education, food, water, fresh air and transportation, so we face more consumption and more difficulties in life. Poor developing countries contain a huge number of populations and suffer from many problems. We should not forget that

corrupt political parties play an essential role in sabotaging the economy and stealing goods and resources. For instance, India suffers from many real problems where unemployment, deterioration in services and many people have no place to live. Indian population is over one billion and 300 million, it is a terrifying number. How we

imagine the environment with this horrible number. This community is a mixture of

poverty, crime, drugs, pollution, illiteracy, jobless and more resources depletion. Consequently, pollution and its impact will be everywhere.

Mainstream treatments of population excess are few. True, for those who argue that many poor countries are already too populous...To be one of 439 million Indians is terrifying," when a slight three decades later Indians number over one billion. But for the most part authors define an "overpopulated" world as one more crowded than their own. (Shriver , 2003: 156)

In general, our planet suffers from overpopulation. Here, we have two contradictory illustrations. There is a shrinking population in some industrial countries such as Japan, Italy and Spain; these countries face the future dangers. Clearly, they suffer from the low birth rate and the large number of elderly people. Indeed, this crisis represents a real challenge. Unlike Africa and the Middle East, where rapid population growth; this growth needs the requirements of life and needs such as housing, food, water, education, medical care and infrastructure. Indeed, they become within a dangerous field. But originally these poor and developing communities confront challenges and crises. Therefore, overpopulation has serious social, psychological and economic consequences. Here, the author illustrates the unpleasant events or objects that will happen in the future such as overpopulation's problems, pollution, social crisis, dissolution, degradation monopoly impoverishment, diseases, unemployment, etc. And it is important to deal with the matter seriously. Ultimately, overpopulation demands overconsumption and more services, and it leads to (imbalanced ecosystem) dangerous ecological issues and human problems away from the standards of good living.

Whereas a number of industrialized nations, from Italy and Spain to Japan, will actually face shrinking populations ... other regions such as sub-Saharan Africa and the Middle East will continue to undergo explosive population growth with the attendant challenges of providing education, jobs, and medical care to an ever-growing number of people. (HEISE , 2001: 1)

There are efforts and instructions presented by some governments to improve living standards for citizens such as education, health and other services, in addition, they attempt to control overpopulation and pollution but in vain. Whereas these governments have known the results of overpopulation and its impact on Zanzibar's population and the environment. No doubt, some greedy companies have a strong

steady belief in increasing production to suit increased consumption searching for profits. They encourage the population growth under false and deceptive slogans to satisfy their greed and achieve profits indifferent to the results. Consequently, there will be many kinds of pressures: social, economic, environmental, food, water, health, housing, etc. In this case, it is necessary to be a rational and creative planning to limit overpopulation and pollution to build and stabilize society. Eventually, Zanzibar represents a depressing and frustrating place. "This picture is all the more depressing because the quality of life deteriorates in spite of the efforts of governments in *Stand on Zanzibar* to carry out population and pollution control, evidently no panaceas in themselves." (Livingston , 1971: 258).

In fact, Zanzibar is characterized by overpopulation and multiple races and ethnicities. This controversial country is ruled by rival political parties. In Zanzibar, all competing nationalities and political parties live on one land. The people do not think about their common future and the future's generations, and also the environmental, economic and social destiny. But they believe in partisanship and ethnicity. They live in one area; their community is one, their environment is one and their food and water are one, so their fate is common. Either the whole lives a luxurious life or lives in hell. Instead, political, communal or ethnic frictions and tensions increased because Zanzibar contains many races, and each race considers itself the best. These competitive and opposed political races spend their time; in their work and in their leisure, in competition, partisanship, and elections neglecting all fields of social, economic, and environmental life. How we expect this country. It is an example of backwardness, chaos and pollution. Eventually, Zanzibaris have real concerns and worries for society and for the future. By the way, it was under the oppression and persecution of British colonialism politically and socially. When conflicts engendered among the parties, tragically they plundered, pillaged, and murdered each other. Like

this society is a good example of pollution in all its forms and fields. Many individuals and amoral companies exploit the conflicts to provide the fighting groups to achieve more profits.

Nor has nationalism been accompanied by a general belief that all Zanzibaris share a common political destiny. Rather, nationalism has exacerbated communal frictions long latent in an ethnically heterogeneous population... Competitive nationalisms have extended politics into virtually all areas of social and economic life, and the tensions and fears which divide Zanzibaris as supporters of opposed political parties estrange them as well in their work and in their leisure. (Lofchie , 1963: 188)

In general, overpopulation plays a major role in environmental sustainability. It can lead to deforestation, water pollution and air pollution. These have negative effects on the environment and also impact on daily human lives. We must mitigate the use of nature resources, and we must use new technologies and practices fit with the environment. Finally, *Stand on Zanzibar* is one of Brunner's most famous novels that warns of population inflation and the need to confront it, to avoid the future disasters. It is a distinguished and prominent science fiction novel that predicts events and dangers that turn into real reality. Additionally, it describes even small details in a miserable society in the future where the spread of extremism, partisan, poverty, illiteracy, rampant crime, pollution and violence.

CHAPTER III

3. RACISM IN *THE JAGGED ORBIT*

1.1. Impact of Racism on the Environment and Society

There is an issue that is considered an important and prominent social issue in society and also plays a major role in society's structure and life; it's racism. Here, we have the best source in history and in the world although there are many people who deny that. In fact this source is the best. All streams of science and knowledge spring and come out from this great source. The Noble Quran has discussed and explained all humanitarian, social and other issues completely and accurately. For example, The Noble Quran has explained the issues of human equality, familial and class discrimination, injustice and human rights, in addition, The Noble Quran has condemned all sorts of racial discrimination. No one is superior to another by the skin color, language, race or nationality. Also, The Noble Quran has nullified all sorts of inequality of pride in skin color, language, race, etc. and has set out egalitarianism for all humanity. "O mankind! Indeed We have created you from male and female and made you peoples and tribes that you may know one another. Indeed, the most noble of you in the sight of Allah is the most righteous of you. Indeed, Allah is Knowing and acquainted." (Quran , Surah: Al-Hujurat, verse:13).

Throughout history, inequality and injustice have appeared among humans and sometimes in the form of inhuman and degrading slavery. And we should not forget that the skin color is considered one of the criteria of superiority, pride and arrogance over other people who have different skin colors. One of the victims of this supremacy is African-Americans. Exploitation, injustice, discrimination and racism have made history black and hateful. That is why Brunner sharply criticizes this issue for being important and sensitive. Here, we have a wonderful dystopian novel, *The Jagged Orbit*. It includes an awful warning of racism illustrating the horrific consequences of all aspects of human society. It is directed to the US criticizing the miserable state because of racism. Undoubtedly, any society practices racism suffers from problems, disturbances and instability. Sometimes, there are riots, clashes and fights between people and the police. As a result, they struggle

and kill each other using weapons and other tools. So pollution will be spread in conflicted areas because of weapons

and corpses. Eventually, society and the environment will be collapsed and destroyed.

Life is a strange mixture of conflicts and struggles between humans and their existence. Coexistence and integration are important factors in society. Black people are insulted and oppressed by whites, so they have a revolutionary and vengeful spirit. Whites buy enough weapons to be ready for any possible war against them. On the other hand, blacks buy weapons to take their rights and get rid of slavery and genocide that may happen in the future, where each party has future predictions and worries. Blacks don't feel that they belong to their society, so they have aggressive reactions. Within these fertile conditions and the environment, arms and war dealers are active and providing the warring parties with weapons to achieve their evil goals and profits.

We know after the north-south civil war which more than seven hundred thousand people were killed and southern states attempted to secede. The US President Abraham Lincoln issued an important and bold decision in 1863 to abolish slavery and free slaves. Certainly, all these events were due to racism and injustice. Pollution will be everywhere, due to fires, weapons, chemical materials, corpses, diseases and widespread lack of services. At the end, air, water, community and the entire environment will be polluted. "The Gottschalks pit the black and white communities against each other in an ever-increasing arms race... exploiting white racism and fears of retributive black anger, and black fears of genocide, until they become self-fulfilling prophecies." (Stern , 1976: 116).

In America and South Africa, racism is the master of the situation. There are racial discrimination and conflict between whites and blacks. Blacks are not allowed to enter whites' places such as schools, parks, hospitals, etc. that is why Nelson Mandela faced and refused racism and called for equality and integration in one society under equal human rights law. Normally, strangers on their land do not care about the environment and their society. In America, there is a good example of blacks' miserable situation: *Uncle Tom's Cabin* and how bad whites were. According

to Brunner, racism and inequality are the core of the novel. Under the tough circumstances, revenge incites blacks to harm the environment and whites too. Everywhere we find thrown waste, smoggy air, dirty places and polluted water. Eventually, many things will be polluted and caused harm for both blacks and whites.

"In JO, white people are called "blanks" and black people "knees"-usage the narrator later reveals is derived from the South African apartheid terms "blanke" (white) and "nieblanke" (nonwhite), thus hinting of JO's fundamental extrapolative assumption." (Stern , 1976: 116).

There is a human race descended from Africa and called Negro. These people are entirely different from others in their complexion, color and traditions. But what is sad, they are enslaved by whites and treated as slaves. Moreover, they receive all kinds of oppression, suffering, injustice, violence, racial discrimination and inequity. Racism is widespread in all sectors of life where injustice and oppression. White people always consider themselves in the first class, while blacks are in the post-second class. Whites always feel white supremacy. Here, there are a few lines, as an example, which illustrate the gap between the classes of society. Historically, the pressure of oppression and insulting due to organized opposition and resistance. More air and pressure in the balloon will finally explode, and this is the case for black people in America. These rural, poor and oppressed people feel neglected and marginalized in health, education, economy, environment and services. Furthermore, they endure burdens more than whites. Sadly, in America, slavery, racism, and oppression were practiced widely, so we see the top of racial segregation. White people plant thistles, so they harvest thistles, not flowers. As a result of their evil deeds, they receive negative and violent reactions. Eventually, we see a devastating effect on society and the environment because of racism and inequity. In this case, we see a society polluted socially, environmentally, politically, healthily, etc.

Between 1946 and 1961 white wages increased by 35 percent, while black wages increased by 11 percent. In 1967 the average African miner received \$21.60 while the white South African received \$364.10. In the

construction industry, African workers were paid \$56.70 as against \$331.45 for whites. (Gappert , 1971: 27)

What happens in the third world is a terrible matter, where there is no humanity or law. Oppression and inequality grow in this fertile soil. In the past, racial discrimination, oppression and inequality were spreading as in America and South Africa. These countries were based on racism where chaos, pollution, riots, lack of cooperation and conflicts were widespread and everywhere. In this case, no place for development, infrastructure, economic projects or education. There are demands for politicians and companies to stop the source of pollution, not to leave societies suffering more but to find appropriate solutions and improve the people's lives because they are a part of society, regardless of their race or color. In Zanzibar, many conflicting racial parties where they oppress each other neglecting their future, their generations and their country. They follow a failing policy and make the society polluted in all fields. "Racial divisiveness runs deep in Zanzibar politics" (Campbell , 1962: 87).

1.2. Impact of Wars and Pollution on Humans and Society

In the mid-1960s and in America especially. There was the US' violent, illegality and suppression against black people. Where the unfair policy, bad treatment, injustice and racial discrimination between blacks and whites lead to riots, racial violence and terrorism. This dark era that blacks lived and experienced was full of insults, planted a spirit of revenge. Undoubtedly, there will be a black revolution against whites and the system of racial segregation. If there is a society full of racism and hatred, no doubt, it will be an example of chaos and full of irresponsibility, no education, no good health care and injustice among citizens. Blacks worked in the houses and on farms, and they were subjected to all kinds of injustice and violence. Certainly, they will not bear their responsibilities because they do not have or enjoy their rights. Moreover, they are persecuted and oppressed by a second category, so they do not feel a sense of belongings to their society and the environment that they live in. Eventually, we find pollution spreads everywhere, and this society becomes a fertile environment for pollution and various infectious diseases socially and ecologically. *"The Jagged Orbit* takes on domestic and

interracial violence, and thereby reflects conditions in the US in the mid-'60s." (Murphy , 1978: 26).

Social interaction is an essential means of communication among members of society. All individuals are the same, and they belong to one society. It is wrong to marginalize any group because it leads to disastrous social consequences. Unification or social cohesion makes society cohesive and strong. It makes community members like each other and share their work. Moreover, we note progress in all sectors and fields of life where services are fully available. The author warns against the

isolationism of some classes and groups of society and recommends social integration and unification. Otherwise, a society will be fragmented, polluted, not coherent and socially unrest. Additionally, social, physical and psychological diseases will be spread. Black people do not feel belonging to their society, but they feel rejected and marginalized by others. So they will behave irresponsibly, and they are not concerned with the consequences. How they coexist with this tough reality. For instance, they will throw rubbish and waste everywhere polluting water, air and the environment around them causing diseases and problems. It is not environmental justice where whites dump their waste and polluted materials on people of color and poor people too. "Orbit thus warns against isolationism and offers social unification as the antidote." (Murphy , 1978: 27).

Brunner has insights into human relationships and future visions of society disintegrates and collapses under the impact of conflicts, violence, drugs, racism and corruption. Here, we note racial discrimination clearly. The author illustrates the misdealing of blacks. Blacks don't have rights as whites have. They don't have the right to get a visa to travel to any developed country like America. Although Lenigo is black, he gets a visa to America. But it is unusual; there is a strange thing, indeed, it is a computer's wrong. It is supposed to be rejected automatically and not to get a visa because he is black. Here, we see a sort of racial discrimination. How blacks deal and coexist or integrate with the racial white mentality. But they are desirable people for work and serve, no more. Here, we have a combination of white and black people, but black people are undesirable and treated as aliens. Undoubtedly, we will see a disintegrated society, socially, economically, and environmentally. Where

interracial tensions and fighting. War merchants and evil people want more profits, where they exploit ethnic conflicts and sell weapons to both parties, and also they are not interested in the results. They want to increase arms sales to the conflicting parties. In this case, what will the community be like? Will we see a Utopian community or a utopia? Will we see an advanced society where technology and modern infrastructure? Of course, no. We will definitely see a completely polluted society in all fields. This terrible situation has devastating consequences for the present and the future.

In TJO immigration officials use computers to issue visas. Despite this, Morton

Lenigo, a black revolutionary and very undesirable alien, gains admittance to the United States. A computer error? No, Anthony Gottschalk blackmails him in to heighten interracial tensions and increase arms sales. This would be less likely to happen if the entire immigration system were computerized and beyond human tampering. Once in the country, Lenigo easily eludes police, a not uncommon ability of felons today. (Goldman, *The Polymorphic Worlds of John Brunner: How Do They Happen?* 1976: 106)

All human race should hear and understand these words; life and nature for all beings and organisms not only for humans or certain humans, no more suffering or disasters. Mulligan likes mankind and wishes goodness and peace for all. He appeals people to act and behave honestly, rationally and mercifully with others. No difference between blacks and whites. Some idiots believe life is long, on the contrary, it is short. They don't know how to manage their silly life. They are interested in the pleasures of life, and they conspire against others to destroy them. Indeed, they destroy themselves, others, society, the ecology and the future. Male or female is a member of a community, he/she should integrate and interact with others and have a high goal to achieve futuristic purposes and projects away from suffering, destruction and pollution. "God damn you for crazy idiots! All of you! You're not fit to manage your own silly lives! I know you're fools-I've watched you and wept for you. And... oh my God! His voice cracked to a breathy moan. I love you! I've tried not to and I can't help it. I love you all." (Goldman, *Heroic Man in Unheroic Society* , 1978: 263).

White Americans exaggerate the praise of white people (the same race), and they are unusual (creative/innovative) people who can go to outer space and return safely and peacefully, bringing with them new discoveries. In addition, they make missiles, bombs and modern technology, but black Americans are the opposite. They can't do anything. In this respect, whites and the US government practice the oppression and racism against black people, and the marginalization of blacks as a popular culture as well. Black writers are human beings like whites. They have thoughts and feelings, and also creative talents that express their suffering and describe their oppression. At that time, blacks were forbidden from life activities. Even black writers were not allowed to enter white literary clubs. Moreover, the white literary

establishment refused the participation of black writers or the printing of their literature. Here we clearly see injustice and inequality. Under these cruel circumstances and suffering, black people have to break chains of miserable reality. Black people as strangers don't feel belonging to their country, so they behave and act carelessly with negative reactions. How they interest and care for the environment. Consequently, unemployment, wastes, rubbish, drugs and violence will be everywhere. This leads to pollution and diseases for humans and the environment. "For many years, the white literary establishment's desire for blacks to write about being black in a white world kept black writers from entering popular genres in force." (Bould , 2007: 220).

In America, there are multiple races and nationalities. There is a struggle between whites and blacks. Blacks were oppressed, slaved and exercised violence by whites. Moreover, they do not have any rights; schools, education and even their children are not theirs. There were racial divisions, apartheid, segregation and hatred. Most whites feel paranoid and white supremacy to blacks. According to this miserable situation, how blacks feel belonging to society, community or country. Struggles and wars will inevitably take place; this leads to damage such pollution to society and the environment. Pollution and its effects pose a serious threat to the Earth's future and humankind as well. Through man's indifferent activities and searching for more profits, he/she makes suicide gradually. This wilful and

cataclysmic act causes a destruction of the planet. White people have a paranoia full of pride and arrogance where they insult and humiliate blacks. Further, they educate their children on radical socialization; black are not like us, and we are the best. They are just slaves to serve us. This unfair policy is vividly drawn by parents for children and so on. Realistically, we see ethnic divisions, apartheid, inequality, hatred and suffering. In this case, society is a fertile place for crime and violence. Blacks' suffering and oppression like a dormant volcano, one day, it will erupt and explode.

The novel also explored the "socialization of paranoia" in several broader contexts, all of which were vividly drawn. In the United States of 2014, apartheid-style racial divisions fuel hatred and suspicion between "blanks" and "kneebunks," terms Brunner derived from the Afrikaans words for white and nonwhite. The skyrocketing crime rate contributes to a pervasive lockdown mentality. Neighborhood-watch groups have evolved into armed militias. (J. Smith, Chapter Title: FIERCE SPECULATION, 1967–75 , 2012: 71)

Undoubtedly, racism destroys the individuals and affects the freedom of some groups in society: the suppression of perspectives and the marginalization. The insulted group feels strange, undesirable, and inactive in its society. So aggressive and negative reactions have formed and appeared. Smoking, drugs, unemployment, violence and pollution are spread everywhere leading to pollution of air, water, plants, food and the environment. Blacks are not interested in surroundings. Therefore, pollution and diseases will be spread. Whites consider themselves "master race". Whites' philosophy believes in a strange theory that they do not make/commit any mistake/wrong, but Black make. They fully dominate blacks' lives. Blacks realize the American system is unfair and oppressive, but they can do nothing. And they know how rotten the American system is. They struggle for civil rights and equality to live in free and open society is ruled by real and fair law. "White dominates black, with, on the other, a sociological imagination refusing to conceptualize whiteness as an unchanging essence." (Garner , 2006: 269).

It is very important to acknowledge and endorse that *The Jagged Orbit* is a living example of what happens in America and at the end of May 2020 and of course, it was for the US in 1969. Brunner's novel appears clearly about the racial discrimination that whites have practised blacks. A white policeman kills George

Floyd, an African American citizen and unarmed black man, choking, in Minneapolis, Minnesota. Eventually, George died from asphyxiation. Demonstrations, protests, riots, violence, fires and burning of some cars and shops and looting of shops are in many cities. In the United States, blacks are still suffer from racial discrimination. Of course, they don't feel belonging to their society, and they don't care about the environment. How do they feel that they are part of this country? How do they feel responsibility towards this country and the environment? How do they preserve the environment? In this case, the ecological pollution, mental pollution and social pollution will spread more and more. The stabilization and settlement of the situation are very important in society to achieve development and advancement. Lastly, all human beings are equal and responsible for the environment because nature components belong to all creatures and organisms. Racism is a dangerous social disease, rooted in many people. Therefore, these rotten roots must be removed and eliminated. It is true that all human beings have different mental and moral competencies, but they are equal in rights and duties. It is not permissible to insult and marginalize others, based on ethnic, religious or national. We should acknowledge this fact because it is the best antidote to the problem of racism. Of course, living in a fair society leads to a civilized and developed society far away from all sorts of pollution and its problems.

CONCLUSION

To conclude, in the course of the novels, there are many forms of pollution, including the increased uses of nature resources and modern technology and human's behaviours/activities to achieve ambitions and profits neglecting the others, both human and the environment. Additionally, overpopulation and racism play major roles in environmental pollution. Nature is a valuable and precious gift. The indifferent relation between man and nature must be canceled. Furthermore, we must build strong and friendly relations because there are mutual and interactive relations. Racism contains oppression, repression, exploitation, human poverty; these, in turn, have serious effects on society and the environment. Brunner depicts his dystopian world similar to contemporary life, where he portrays the near future as a collection of horror stories. Further, he disputes energy resources and real ecological analysis where man is energy-sapping, depressing and apathy-making.

Brunner is one of the prominent science fiction writers and a very influential voice in literature. He has many novels as a reflection of contemporary state. He examines a number of matters such as pollution, overpopulation and racism within critical and theoretical study. Furthermore, he seriously places the literature of science fiction within the wide category of the apocalyptic; this literature concerns the destruction of the world and humanity together. He suggests real and effective measures to solve the environment's crises, overpopulation's problems, racism's problems and results and society's crises generally. Throughout the novels, pollution and its impact is a serious matter; it must be discussed rationally and scientifically. In Brunner's novels, the main cause of the final apocalypse is the world society generally and the US especially. The world suffers from pollution, overpopulation, global poverty, inequality, race, violence and environmental degradation.

Dystopian literature represents a critique of social conditions, environmental and political systems through the imaginative extension showing present and the future faults and contradictions and warning against the negative consequences. So it is an imagined community that is undesirable and frightening, in addition, it is a society of suffering, overpopulation, racism and injustice. In these dystopian novels, Brunner focuses on environmental, social, and political issues and gives us a dark vision of the

future, where he encourages his readers to take the responsibility for the negative trends developing in world culture. In the near future, we should suggest solutions for the uncertain and dark future because we face a serious disaster. Everything is polluted; air, water, food, soil, plants, mental minds, etc. it is important to use a filter mask to drink or breathe. As we note, two novels are directed against Western societies, especially America. It looks for greed, dominance and manufacturing weapons which have a devastating effect on the environment regardless of the risk. The fundamental concepts of ecology and instructions aim to reduce or remedy damage or hurt caused to the natural order by humans. This planet is rich and full of its natural resources, yet there is poverty and hunger. So it is our duty to eliminate them because they do not deserve to live with us. We shouldn't forget that transportation is the largest pollutant in the world, so we should encourage clean energy such as electric and solar energy instead of petroleum. And we should use many procedures to reduce pollution and its impact. For example, a high standard of living and care about the environment demand to reuse or recycle everything and not to throw waste everywhere. Clean water, fresh air and healthy food, not smoggy air or polluted water or food, contribute to better health and life, more productive societies and a stronger economy. In addition, clean seas, rivers and lakes offer enjoyable places to swim without having to worry about what pollutants might be in the water.

The environment pollution represents a serious threat to humans and the environment, and also it threatens the life of all organisms and plants as a result of technological, industrial and civilized progress of humans. Every day, factories, power plants, refineries, etc. throw millions of tons of smoke and toxic gases that spoil the air and make it harmful to breathing. Factories also make huge amounts of waste in water; seas, rivers and oceans, which spoil them and make them unsuitable for human use, animals, plants or organisms. Additionally, ships dump waste and residues into seas and oceans. There are relations among the developed countries and developing or underdeveloped countries, where some of them export waste to others destroying nature and humans. All these behaviors and acts lead to the imbalanced ecosystem. The expansion in the construction of housing, infrastructure, factories, various energy

plants, etc. and use of pesticides, herbicide or insecticide for various agricultural crops leads to dangerous harmful effects with soil. In addition, it damages plants, animals and people's health. Therefore, the export and import of foodstuffs from contaminated areas have a serious impact. As we see, pollution is a global problem, not local or related to a certain country.

Around the world, many people die due to pollution. Undoubtedly, there are appalling fears of climate changes, the devastating threats to the environment and political conflicts. So how will the planet be in the future? Can we live or not? The future looks black. Therefore, it is supposed to be an environmental awareness where man understands what must be done and what must be avoided. Moreover, it should be common environmental and social concerns. This world must be full of humanity. For example, if the majority of humanity disappears (no overpopulation), then the earth heals from diseases and becomes better. In this respect, it is necessary to integrate pollution and its impact in the educational process and apply them in schools and universities because protecting the environment from pollution is the responsibility of all sections of society. Indeed, teachers and instructors should play an active and critical role in educating students and people about the dangers of pollution to avoid its disastrous impact. And there should be seminars and workshops constantly to increase people's awareness of all levels, knowledge and ages. It is important to provide healthy, non-polluted food, good education, modern hospitals, clean water and suitable sewage while observing modern environmental standards far from pollution. In addition, to preserve water resources such as seas, rivers, oceans, animals, forests, and trees planting instead of cutting or burning. Further, to encourage people and society as a whole to establish a clean educated and civilized society free from pollution and environmental problems. In this case, we can stop pollution by reducing all sources of pollution and avoid pollution in all its forms and everywhere.

Brunner emphasizes that a future ghost will destroy both man and the environment, therefore he suggests steps and solutions to avoid the future disasters. There is a main problem that ecological pollution arises because of modern

technology and careless government, corporations or individuals. So nature and we have become

victims of ecological pollution. We must learn from the past, take lessons and prepare for the present and the future. Some industries, scientific ambitions, overpopulation and racism lead to environmental pollution and destruction. So we must look after it largely because we will be the biggest losers. It is true that the earth population is different peoples/nations but they live all on one planet and have common destiny.



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Tez Başlığı / Konusu: *John Brunner'in The Sheep Look Up, Stand on Zanzibar, The Jagged Orbit*

Romanlarında Kirliliğin Etkileri

12/06/2020

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