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Environmental Degradation and the Anthropocene in Amitav Ghosh's *Gun Island*

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Abstract:

In this article, the Anthropocene perspective is used to analyse how human activity in Amitav Ghosh's *Gun Island* affects the ecology of the planet. The Anthropocene hypothesis contends that nature, which has been so severely harmed that it cannot regenerate, and whose equilibrium has changed. It has changed due to human involvement rather than meteor impacts, ice ages, or global causes as they were in the past. The consumption of fossil fuels, particularly after the industrial revolution, global warming, the rise in sea levels, and ocean acidification are just a few examples of the unpredictable and inconsistent climatic effects caused by human activity. These effects demonstrate that humans have the greatest influence on nature when compared to other living things. The greatest influence on the environment in the twenty-first century is human, despite the fact that man's time on earth is relatively brief. As a result of man's worldwide impact, nature, animals, plants, and his own life are all affected by him in unanticipated ways. In light of this, Amitav Ghosh's novel *Gun Island* explores how humans affects the ecology and links the past and present through a Bengali story, illustrating how this influence extends into other facets of the natural world.

Keywords: Ecology, Migration, Climate Change, Anthropocene, and Global Warming

Introduction:

Ever since human first appeared on the earth, he has been a part of the ecological system, just like the other ecosystem members. All living things in this environment adapt to the guidelines set forth by the ecosystem in order to live. Animals, on the other hand, adapt to their environment by hibernating or migrating to other locations when conditions make survival impossible, while plants do the same by changing the colour of their leaves or shedding them as the seasons change.

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The ancient people unquestionably could only exist in the environment by conforming to the laws of the habitat they were living in, just like the animals and plants. It was impossible for humans to survive in the environment if they refused to comply with the laws of the environment (Barrett 205). Yet, the development of the first technologies has altered life for people and in this realm, people have emphasized their position as the leaders of nature.

Since becoming the king of the jungle, humanity has been drastically changing the balance of the environment. As a result, the collateral damage of the change has pushed the earth into an unrecoverable state, and as a result, the human influence on the environment has come to be recognised as the cause of the deterioration on the planet's ecology. As humans have had such a severe impact on the environment over the past 200 years, some scientists believe that this imprint requires the designation of a new geological epoch because it is evident everywhere, including untamed seas that are out of human reach and distant locations. According to *National Geographic*, the Mariana Trench, the world's deepest oceanic trench at 10,975 metres below the surface of the Pacific Ocean, cannot escape the scourge of plastic pollution, as demonstrated by the event, and plastic and microplastics have been found in the stomachs of numerous aquatic animals (Gibbens).

Without a doubt, compared to the age of the planet we inhabit, human presence on earth is relatively young. However, in such a short period of time, we have managed to upset the balance that had existed for millions of years, and we now pose a greater threat to the health of the planet than all other entities combined (Dickinson 485). Due to this, some scientists propose renaming the Holocene era that followed as the Anthropocene, indicating that human activity is now the primary driver of the planet's systemic change as opposed to earlier periods where events such "meteor strikes, the movement of continents and sustained volcanic eruptions" (Lewis & Maslin 171). This study intends to investigate how Amitav Ghosh constructs a fictional picture of the contemporary world influenced by human-induced consequences in *Gun Island* and how the ecological changes caused by humans have an impact on all living things and drive species to migrate by force.

Amitav Ghosh's novel *Gun Island*, which is fiction, tackles a number of ecological issues, including human exploitation of nature, which has a significant impact on all life on Earth, climate change brought on by anthropocentric consequences, and the issue of migration brought on by this ecological change. In the past, geological processes and the microscopic elements that made up the Earth affected the climate, but in the Anthropocene period, humans are the main cause of climate change (Steffen, Crutzen, & McNeill 614). Because of the consequences that the industrial revolution has caused and the impact that these consequences have on living things, the human impact on nature is now more commonly seen in this novel. The tale demonstrates how a micro-disorder that is directly caused by human activity

eventually develops into a macro-calamity that has a negative impact on the global climate. All living things are impacted by these unpredictable and changeable changes, which in certain cases even lead to the extinction of some species on earth.

According to State of Global Air, the majority of the novel's action takes place in India, one of the nations with the worst air pollution in the world (Health Effects Institute). It is terrible that the impact of greenhouse gases seems to be so strong in a city that is so close to Sundarbans, the largest mangrove forest in the world. While the novel presents this tragic circumstance as fiction, New Delhi unhappily experiences the greenhouse effect to a great extent in actual life (Sequeira 10), which causes the story to reflect the tragedy in real life. Dinanath, the book's protagonist, is an Americanized version of Deen who works as a book dealer, "rational, secular, scientifically minded (Ghosh 35)". Dinanath embarks on an extraordinary journey from Los Angeles, which is surrounded by a forest fire, through air-polluted India, to Venice, which has been inundated, showing how the ecological system is interconnected throughout the world. The environment as it is depicted in the novel is directly impacted by human activity, which upsets the delicate balance of the environment. As a result, every living thing in the biosphere is affected differently by the chain reaction that began with human influence, and humans, as members of nature, are also adversely affected by this change in various and significant ways.

People use the Sundarbans, the largest mangrove forest in the world and the habitat of thousands of species, as a source of food. According to the text, since ancient times, every merchant travelling for foreign commerce has had to pass through the Sundarbans Forest. Because of this, the passage of traders through the forest introduces human influence into the forest's interior. In this situation, the fight between man and the natural world dates back much longer than the quest that the main character, Deen, is on to reach the shrine. Nonetheless, a shrine constructed by humans in such a sizable mangrove forest is a testament to human advancement in nature and shows just how far and how inaccessible human influence in nature can extend. The Manasa Devi shrine, constructed deep within a mangrove forest, is reminiscent of the plastic bag discovered in the Mariana Trench in that both instances involve signs of human impact that can be found where they do not belong. When people disrupt nature and negatively affect its balance, nature responds by changing the climate in a way that is unfavourable and unpredictable for all life on Earth.

When the harm that humans do to the environment is viewed as a single, little incident, the same amount of harm performed by millions of people becomes the most potent force altering the equilibrium of the planet in the Anthropocene epoch, causing a butterfly effect for all of the planet's living things. According to the examples in the novel, the rise in salty water levels in the Sundarbans and the change in the nitrogen level in the soil caused by the usage of artificial fertilisers impede agricultural operations for the people living in the area. A refinery built in the vicinity pollutes

the rivers, raises the water's arsenic concentration, and decreases the variety and number of fish in the stream. Rising human-caused deforestation in the area, coupled with a drought that causes streams to dry up for the same reason, results in rivers ceasing to feed all those people, starving and impoverishing them to the point where they must leave the area in search of other chances. Climate change has been impacted by this forced migration, which has harmed not only people but also animals and plants. While animals are impacted by climate change, including dolphins that beach in the Sundarbans, hungry birds that start forest fires, and venomous snakes and spiders that appear outside of their natural habitats, the impact of climate change on humans is seen in the novel as having economic, sociological, and psychological repercussions that are parallel to actual environmental concerns. A forced migration of animals and people who depend on the mangrove, agriculture, and fishing for a living results from the change that starts with the destruction of the forest, land pollution, disturbance of water sources, a rise in the level of saline water to the inland farmlands, and ultimately the killing of the fish population in rivers. People are forced to migrate as a result, as is demonstrated in the novel by the vibrant community of Bengali construction workers in Venice. People turn to theft or even prostitution as a substitute for the unemployment issue brought on by the devastation of ecology, illustrating the psychological, sociological, and economic effects of the environmental shift.

Animals, on the other hand, are attempting to adjust to the unstable and unpredictable climate patterns by moving to other locations, just like people do, or by killing themselves, as in the novel's beaching of Irrawaddy dolphins. As was already mentioned, it is clear from the novel that human impact has been causing environmental disturbances on a large scale for quite some time. A refinery located deep within the forest is allegedly poisoning the area's pure water supplies with arsenic, which is related to the decline of the fish population and contamination of the subsurface water. The use of synthetic fertilisers in agriculture is also thought to be a significant contributor to soil and river pollution, which directly contributes to climate change. Eutrophication of river mouths and coastal waterways is frequently brought on by nitrogen composites, which are primarily produced by sewage and agriculture (Seitzinger & Phillips 350). In the novel, this is a result of local farming compounds and a refinery constructed nearby. Uncontrolled fertiliser use and waste contamination of freshwater resources, including rivers, deprives the local aquatic life of oxygen. The micro food chain that the rivers of Gun Island possess is disrupted as a result of the drop in oxygen levels, and as a result, sea species that depend on the chain either die or are forced to relocate to other habitats, which reduces biodiversity for the local aquatic river life.

The increase in salty water levels also impacts the freshwater ecosystem, which is crucial for humans, along with the damage to farmlands that affects

agriculture productivity and hence the human population's source of income as they depend on it "the integrity of populations and communities of freshwater organisms" (Cañedo-Argüelles, Kefford, & Schäfer 1). Because Irrawaddy dolphins are extremely sensitive to changes in salinity, Ghosh depicts their beaching as a result of the disruption produced by the rise in the salinity level in fresh water (Verutes et al. 1). These dolphins live in vulnerable places, as stated in the book, and an increase in salinity causes a forced movement of the population. Since the population of river dolphins is a dependable indicator of the health of the river's overall freshwater environment, freshwater dolphins serve as markers of the health of the rivers in the basins where they live. In this sense, a population decline is seen as a red flag for the ecology. The novel depicts this circumstance in a way that prevents freshwater dolphins from finding an escape route, causing them to mass beach suicide. The human effect harms the aquatic food chain and lowers the oxygen level in fresh waterways, which causes species to migrate or perhaps become extinct. This is in addition to the increase in salt and arsenic levels brought on by anthropocentric factors. So, related micro causes caused by human impact on ecology snowball into a macro disaster, and the beaching of river dolphins in Sundarbans is only a made-up example of this anthropocentric calamity for the non-human world. However, when considering the bigger picture, anthropocentric climate change has been exacerbating ecosystem destruction for both humans and nonhuman life, as well as for the rest of the world. This is because it is causing natural changes in the balance of nature, such as rising sea levels, unfavourable weather, saline water flooding, increases in nitrogen emission, and higher levels of arsenic in water sources, etc. *Gun Island* further demonstrates that environmental changes resulting from the focused destruction of nature by humans are not only a current issue but also the overall result of human activity. For this reason, the novel suggests to the reader that Bonduki Sadagar, the hero of the myth, escapes from the Manasa Devi and that the compelling reasons for him to change location were due to the global climate change that corresponded with "the little ice age" period as events like the eradication of indigenous people of the American continent and reforestation after European conquest of the Americas contributed to the change of the climate for that time. As a result, the effects of human activity on the ecosystem of the planet in the twenty-first century are not the result of recent events but rather a cumulative load that has persisted for centuries. It is stressed as a result that the sole geological force affecting the global climate in the twenty-first century is human activity.

Conclusion

As they vary on when the Anthropocene began, scientists are divided on whether or not to recognise it as an era. The Anthropocene has, however, already entered the realm of stories, and Amitav Ghosh's book is a superb illustration of the genre to illustrate the anthropocentric impact of humanity on the earth's environment

as a geological element. To be able to denounce the human impact on ecology, such as greenhouse effect, global warming, loss of biodiversity, rise in sea levels, increase in saline water levels, loss of habitat, forced migration of species, contamination of water resources, and so forth due to anthropocentric causes in the twenty-first century, Ghosh features a well-known Bengali myth between the Bonduki Sadagar and Manasa Devi in Gun Island as a modern reflection as a fiction of migration and environmental change. Although the Manasa Devi in the Bengali story is said to represent nature, the gun trader, who uses his wealth and influence to try to flee, actually depicts modern man, who has nowhere to run from such a pervasive and immediate threat. Man is therefore a frail being if he destroys the environment that shields him from the fury and destructive power of nature. In this situation, humankind must appreciate and care for the environment in order to avert an ecological catastrophe that would likely wipe out his species. Ghosh blends aspects of miracle, mythology, and fiction in his book to depict this situation and foreshadow a potential ecological catastrophe. He also serves as a warning to the public about potential world catastrophes that could result from a change in the natural system.

As long as people believe they are in control of nature, there will be an ecological transformation, and this climatic conflict will affect not just the animals and plants but also humanity. Later on, an ecological system change develops into a worldwide issue. Early on, the issue is only a local one, but as it grows, each local issue starts to have an impact on others, and eventually, they all combine to create an ecological disaster large enough to upset the planet's delicate equilibrium. In the novel, people who migrate to places where there is a loss of employment and living space experience the repercussions of this worldwide change there. Hence, a more significant climate shift will not only affect specific regions of the planet and particular forms of life, but also the entire world and everything that lives there. Humans and other living creatures will not be able to escape from such a vast and worldwide ecological change. According to this viewpoint, Ghosh's fictional scenario serves as a warning to the public about potential ecological change and its economic, psychological, and societal repercussions. Therefore, a fictional warning in a novel can prompt a reconfiguration for humans in their relationship with ecosystem, giving humanity the chance to reconsider and restore our relationship with environment, so that our relationship with the earth would not mean dominance and control but instead encourage an admiration for the ecology.

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